The OIL WEEKLY

8-304

United.....for Victory!

MASS. INST. OF TECHNOLOGY
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UNITED EFFORT MEANS A UNITED NATIONS VICTORY

In plants throughout the nation men . . . and women . . . are working to produce the materiel with which to arm our fighting men . . . men who are giving their *all* in order to make FREEDOM once more a reality.

Let's do it in a big way—the AMERICAN WAY. BUY MORE WAR SAVINGS BONDS . . . FOR VICTORY.

REED ROTARY DRILLING TOOLS
SPEED · ECONOMY · DURABILITY

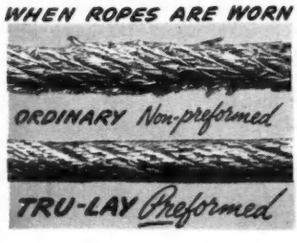
REED ROLLER BIT COMPANY

30% OF ALL INDUSTRIAL ACCIDENTS ARE TO HANDS AND FINGERS

According to the National Safety Council, 30% of all time-out, industrial accidents are to fingers and hands. 20% of these accidents result in infections. And a workman who has lost his hand through infection is just as incapacitated as if he had lost it in a punch press or buzz saw.

We hope you have never had a lost-time accident due to wire rope. Some operators have, however, and 1943 is no time to have workmen laid up with blood-poisoned hands. Many operators have drastically reduced accidents (and compensation claims) by adopting American Cable TRU-LAY Preformed—the safer rope.

Being preformed, American Cable TRU-LAY is tractable—flexible—easy to handle. It resists kinking and snarling. Worn or broken crown wires lie flat and in place—refusing to wicker out to puncture hands or tear clothing...Furthermore, being preformed, TRU-LAY will last longer than ordinary cable. It has far greater resistance to bending fatigue. That means reduced machine shutdowns for replacement—steadier production — greater dollar value. . . . All American Cable ropes identified by the Emerald strand are made of Improved Plow Steel.



AMERICAN CABLE DIVISION

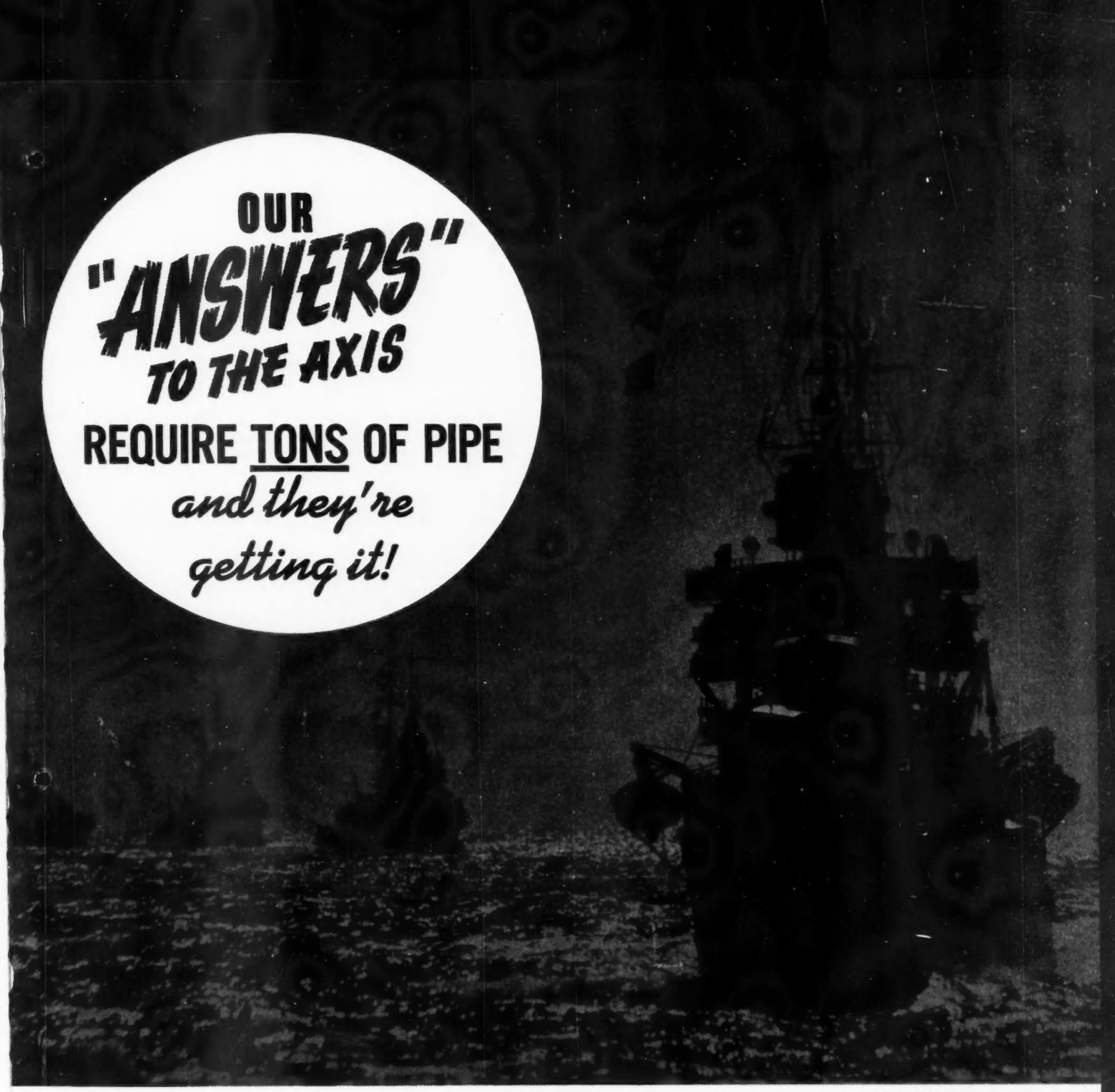
Wilkes-Barre, Pa., Chicago, Denver, Houston, Los Angeles, San Francisco, Emlenton, Pa.

Distributors in all important oil field centers

AMERICAN CHAIN & CABLE COMPANY, Inc.

BRIDGEPORT • CONNECTICUT

ESSENTIAL PRODUCTS . . . TRU-LAY Aircraft, Automotive, and Industrial Controls, TRU-LOC Aircraft Terminals, AMERICAN CABLE Wire Rope, TRU-STOP Brakes, AMERICAN Chain, WEED Tire Chains, ACCO Malleable Castings, CAMPBELL Cutting Machines, FORD Hoists, Trolleys, HAZARD Wire Rope, Yacht Rigging, MANLEY Auto Service Equipment, OWEN Springs, PAGE Fence, Shaped Wire, Welding Wire, READING-PRATT & CADY Valves, READING Electric Steel Castings, WRIGHT Hoists, Cranes, Presses . . . *In Business for Your Safety*



Official U. S. Navy Photo

IN service on the high seas . . . every man on the "alert" . . . every inch of material and equipment "tops" in dependability and durability.

•

Tons upon tons of uniform SPANG PIPE are required in the construction of our guardians of the seas . . . and our entire organization is doing everything in their power to see that they get it . . . in time!

SPANG
PIPE
Sold by
SPANG CHALFANT, INC.
GENERAL OFFICES: GRANT BUILDING, PITTSBURGH, PA.
Sales Offices: Boston - New York - Philadelphia
Pittsburgh - Atlanta - Chicago - St. Louis - Tulsa
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DO YOU NEED CASING!

BROWN HAS RECOVERED THOUSANDS OF FEET OF CASING FROM OLD WELLS IN RECENT MONTHS!

If you have non-productive wells from which casing might be salvaged, chances are that Brown Oil Tools can recover a substantial quantity of it for you.

In cooperation with the industry to find a solution to the critical oil well casing shortage problem, Brown has perfected a method that so speeds up pipe recovery that numerous operators have resorted to this means of filling a good part of their casing needs.

Call Brown Oil Tools today for complete details.

Complete Line of Cutting and Fishing Tools, Wash Pipe and Small Drill Pipe

BROWN OIL TOOLS, INC.
2214-16 CAMPBELL ST. • HOUSTON, TEXAS

DUNIGAN TOOL & SUPPLY COMPANY INC.

GENERAL OFFICES: **BRECKENRIDGE, TEXAS**

District Office
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Branches
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LOOKING AHEAD
. . . with the Editor

New Approach For Future Micromagnetic Explorations

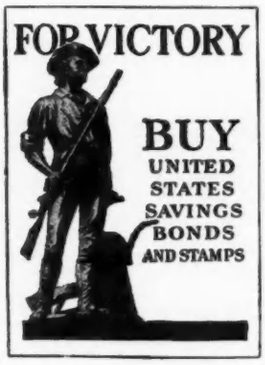
With sufficient practical experience it is possible to survey areas with late type magnetometers with an accuracy of at least plus or minus 1 gamma for each station. A new approach for future micromagnetic explorations can therefore be visualized.

Through interpolation between the regional isogams, the regional magnetic intensity for any station point within an area may be determined. This permits construction of a relative structural contour map. In regions where no subsurface control exists, the micromagnetic relative structral contour map will represent a close and safe approach to subsurface conditions, and corresponds to the time map of the reflection method for such areas.

In regions where some subsurface control is available, it is possible to go a step further and construct sub-sea structural contour maps.

Though the micromagnetic method, especially the last quantitative step, is relatively new, sufficient practical experience has been gained to establish it as sound in principle and of great potentialities.

This entirely new approach for future micromagnetic exploration will be described in an illustrated article written exclusively for THE OIL WEEKLY by a prominent consulting geologist and geophysicist, and is scheduled for very early publication.



THE OIL WEEKLY, Published every Monday. Entered as second class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879.

Why PREforming Conserves Steel, Makes Wire Rope Last Longer

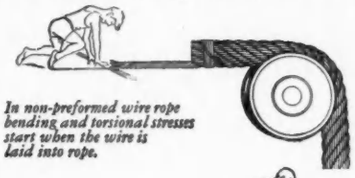
(Note: More and more wire rope users change to PREformed rope each year. During peacetime the reasons for changing from ordinary to PREformed wire rope were primarily two: the cost is lower; PREformed is easier to handle.

Today, with our nation at war and with steel at a premium, there is another and most important reason for using PREformed. It lasts much longer under high speed, severe bending and continuous operation. PREforming thus conserves steel. It conserves workmen's time; rope changes are less frequent. It reduces the accident potential; there is no wickering to harm hands or damage sheaves.)

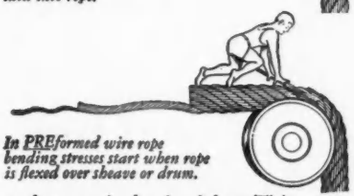
There are two kinds of wire rope. One is called Regular, or ordinary, wire rope. The other is known as PREformed.

In ordinary rope wires are held together under tension. The wires are laid into the rope by bending them to the desired shape. Bending and torsional stresses thus remain in the rope . . . are kept under control by seizing the ends of the rope.

If the wire breaks, it immediately wickers. If the seizing breaks, the strands



In non-preformed wire rope bending and torsional stresses start when the wire is laid into rope.



In PREformed wire rope bending stresses start when rope is flexed over sheave or drum.

and rope wire both wicker. This causes damage and delay. In PREformed wire rope, the strands and wires are preshaped to the exact curvature they will take in the finished rope. Bending and torsional stresses are eliminated (except of course when the rope bends over a sheave). If a wire breaks, it does not wicker but remains relaxed, thus causing no delay or damage.

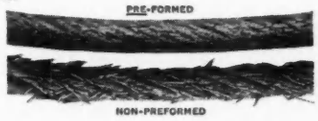
Advantages of PREforming

PREformed wire ropes are like shoes that have been broken in. Instead of being stiff and unwieldy, they are flexible, easier to handle.

They are better adapted to bending and spooling, also. They resist kinking

when the rope is not under load.

PREformed wire ropes are easier to handle also because broken wires lay flat.



And finally, most important, PREformed wire ropes have greater resistance to bending and fatigue. This is

another way of saying that they last much longer, do a better job when the pressure is on, as it is today in war production.

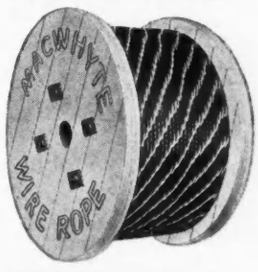
When next you need wire rope, consider seriously the purchase of PREformed wire rope. Today the job we must all do is the "best" job possible. When it comes to wire rope there is no question as to which does the "best" job. It's PREformed.

Consult with Macwhyte

Don't overlook the help that Macwhyte engineers will gladly give you on any wire rope problem. Their advice gained from many years' work on all kinds of jobs is yours for the asking. Let us know the kind of work to be done; we will tell you the rope best suited for the job.

And this we urge you to do: take extra care of your present ropes. Inspect them regularly; lubricate them often. By so doing you can make them last longer and thus aid the war effort. That's what you want; that's what your country asks of you.

This is Number 13 in a series of informative articles prepared by the Macwhyte Company to help wire rope users obtain better and longer service from ropes on the job. All articles in this series are available on request.



MONARCH Whyte Strand PRE-FORMED WIRE ROPE

. . . Macwhyte premier wire rope, famous for its strength, toughness, and internal lubrication.

NO. 652

MACWHYTE COMPANY

WIRE ROPE

2940 FOURTEENTH AVE. KENOSHA, WISCONSIN

Manufacturers of MACWHYTE PREformed and Internally Lubricated Wire Rope MONARCH WHYTE STRAND Wire Rope
MACWHYTE Special Traction Elevator Cable MACWHYTE Braided Wire Rope Slings MACWHYTE Aircraft Cables and Tie-Rods

A Matter of Principle is Involved

. . . built into Morse Drives! Operating on the principle of TEETH NOT TENSION, Morse Drives eliminate the power waste . . . the slippage and frictional contact losses of power that sometimes occur when other drives are used.

Delivering power at practically 100% efficiency, every Morse Drive is a completely engineered power transmission unit so selected and designed as to render unfailing service under even the most adverse conditions.

Meeting the challenge of today's total war, Morse Drives are serving in tanks, planes, guns and ships . . . and in the factories, on the machines producing them . . . transmitting fractional h.p. in no-load timing devices, transmitting 5,000 h.p., and upwards, in steel mills.

Morse Drives will help you make important power savings, will help you speed production with their certain, positive action. Further, because Morse Drives are longer-lived, because they require a minimum of maintenance and service attention . . . they'll save you money.

Your nearby Morse Drive Engineer will assist you in engineering Morse Drives to your job.

SILENT CHAINS ROLLER CHAINS FLEXIBLE COUPLINGS CLUTCHES

MORSE *positive* DRIVES

MORSE CHAIN COMPANY ITHACA N. Y. DIVISION BORG-WARNER CORP.

BRANCH OFFICE AND WAREHOUSE, 1418 POLK AVENUE, HOUSTON, TEXAS

A MIGHTY DRILLER IS YOUR "Wilson"

Keep 'er
IN FIGHTING CONDITION!

Yes, sir, the operator who keeps his Wilson Power Rig properly lubricated, operates it in a careful and common-sense manner, keeps it properly adjusted at all times, gives it regular check-ups and makes necessary repairs when needed, is prolonging the life of his rig and assuring himself of continuous satisfactory service. Much of the manpower, skill and material formerly used for our rigs is now going into equipment for Victory. So help your country by making your Wilson Rig last longer! But a limited number of high quality Wilson Rigs and Winches are still available. Write or wire us for your requirements.

Wilson

MANUFACTURING COMPANY, INC. **WICHITA FALLS • TEXAS**

EXPORT REPRESENTATIVE • GUY E. DANIELS • 30 ROCKEFELLER PLAZA • NEW YORK CITY
PACIFIC COAST DISTRIBUTOR • H. & B. SALES CO., LTD. • LONG BEACH • CALIFORNIA

New Power Unit Broadens Scope of Climax Engineering Company

YOU KNOW CLIMAX as the manufacturer of Blue Streak Gas Engines for oil industry, factory and engineering contractors; as the company that built the first successful gasoline engine for heavy duty cranes; and constructed engines so well that after almost 30 years of operation some of the first ones made are still in service.

WHEREVER SELF-CONTAINED POWER UNITS ARE NEEDED you are likely to find a Climax. Throughout America, in foreign towns and cities, and in remote, far-flung corners of the earth, Climax engines are delivering dependable power with a variety of local fuels and unskilled native supervision.

The first Climax engines were designed for service on tractors. They were so successful for this work that standard units and accessories were made to drive oil field equipment, power shovels, cranes, hoists, locomotives, snow plows, and for stationary service-pumping, electric power generation, etc. Then came increased demands for larger engines and higher speed units to meet modern demands for faster operating machinery.

Perhaps as well known as Climax Gas Engines are Climax Generating Sets—the outcome of a long uninterrupted program of product development. Through the years, as these sets became known, they have served an ever widening market. Prior to the present war, the majority of Climax Generating Sets were installed for emergency or stand-by service. For this work the sets carried a general guarantee to start and be on full load—automatically—within fifteen (15) seconds from the instant of outside power failure.

A count of Climax installations for power service includes practically every type of commercial, industrial and federal project. Included in the list are generating sets for public, office and store buildings, banks, warehouses, packing and processing plants, factories, hospitals, churches, terminals for airways, railroads, bus stations, jails, sewage plants, radio stations, theatres, camps, armories, arsenals, etc.

The new Climax V-12 is the latest addition to the line of Blue Streak power units. Strong as the originals, plus the addition of every new and proved technical improvement, it is the answer to your war demands for a high speed unit to step up power output and reduce down time.

And these are not the V-12's only assets.

Because it is built to stand the punishment of heavy duty service in engineering construction, oil fields and industrial plants, V-12 is a sound investment for your postwar production. Get the full details today by writing to Dept. OW, Climax Engineering Company, Clinton, Iowa.

ANNOUNCING TO ENGINE BUYERS

Easy Starting...Smooth Running and Abundant Power

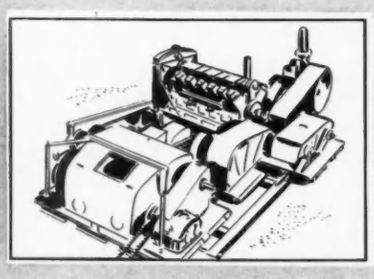
... are the three outstanding attributes of the new Climax V-12 Engine. These features make it an ideal power unit for deep well oil drilling, pumping, stationary power and construction applications. From the standpoint of design, construction and operation, this new engine has everything that technical ability and long experience can contribute.

The simple, well balanced design promotes high mechanical efficiency. The heavy reinforced construction gives the user many years of profitable and continuous service with negligible maintenance cost. Of particular value is the fact that the V-12 can be maintained by regular field or shop men *without the need for specialized training*.

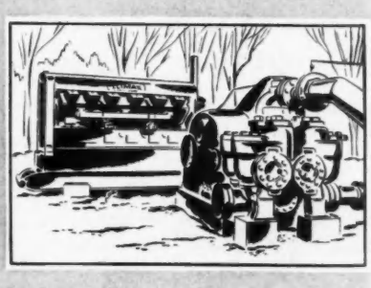
The V-12 also meets today's demands for a higher speed engine which will mesh with modern power consuming machinery. The normal speed range of this engine is from 600 r.p.m. to 1200 r.p.m. for either continuous or intermittent service.

Get all details now on how this new Climax unit can meet your individual needs. Complete information will be furnished by writing to Dept. OW, Climax Engineering Company, Clinton, Iowa.

V-12 IS A GENERAL PURPOSE PRIME MOVER WHICH DELIVERS PEAK



1—For deep oil well drilling



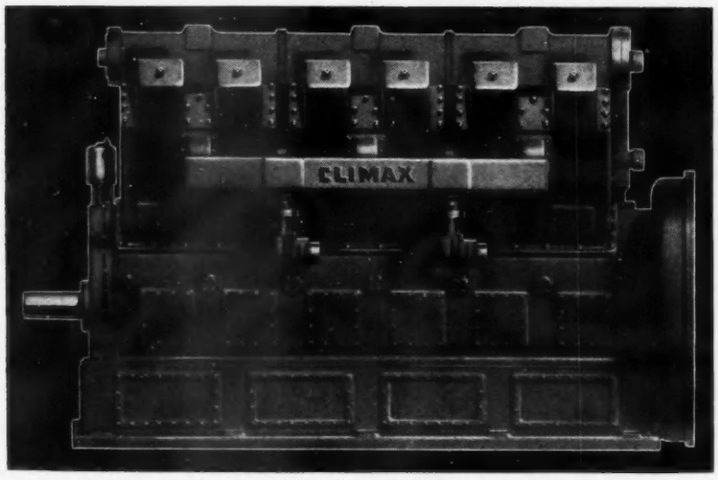
2—Driving pumps and compressors

...the NEW

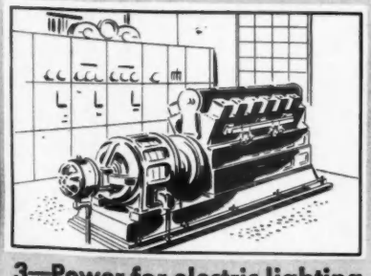
Climax

Blue Streak V-12 ENGINE

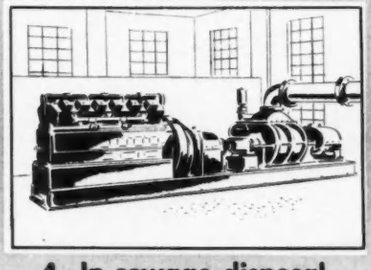
for operation on gasoline, natural gas, butane, sewage gas and other fuels



PERFORMANCE IN THE 375 h.p. AND 435 h.p. RANGE FOR THE FOLLOWING SERVICES:



3—Power for electric lighting and power plants



4—In sewage disposal plants

FACTS

FOR THE MEN WHO MAKE DECISIONS

TYPE AND SIZE

A 12-cylinder "V" type engine available in two bores—Model V-335, 6½" bore and 7" stroke; Model V-390, 7" bore and 7" stroke.

ENGINE PERFORMANCE

Power Generating Capacity:
V-335 (6½" bore) develops 375 hp. at 1200 r.p.m.
V-390 (7" bore) develops 435 hp. at 1200 r.p.m.

FUEL RANGE AND REQUIREMENTS

Both models operate with equal facility on gasoline, natural gas, butane, sewage gas and other fuels. Fuel requirements are low, and the engines will deliver highest power output possible for the fuel used.

FEATURES OF DESIGN AND CONSTRUCTION

1—**COMPACTNESS AND ACCESSIBILITY**—The "V" type engine permits lightest weight with shorter overall length. Easier maintenance and servicing are made possible by the outside location of all accessories.

2—**HIGH MECHANICAL EFFICIENCY**—Balanced design, dual ignition and water-cooled manifolding result in peak mechanical efficiency for the new V-12.

3—**DUAL IGNITION**—V-12 can be furnished in the following combinations of dual ignition:

a — Dual battery ignition.
b — Dual magneto ignition.
c — Battery and magneto ignition.

Each cylinder has two spark plugs. These two plugs provide a greater flame; and shut down due to ignition failure is practically eliminated. Should one plug fail, the other will continue to operate without impairing the performance of the engine.

4—**WATER-COOLED MANIFOLD** is designed to attain uniform quality of gas mixtures. It is located between and above cylinder blocks with all turns and bends reduced to a minimum.

5—**CYLINDER BLOCKS CAST IN PAIRS** from close-grained cast iron designed with an ample factor of safety to take the stresses encountered under all operating conditions.

6—**AMPLE COOLING SURFACES**—Wide spaced, large capacity water jackets cover entire length of stroke. This results in equal expansion of cylinder bores.

7—**WET CYLINDER SLEEVES**—Promote long life, simplify maintenance and add to economy of operation.

8—**SEVEN BEARING CRANKSHAFT** is carried in precision type, steel back babbitt-lined bearings. These are rigidly supported by heavy ribbed and flanged housing members.

9—**ALUMINUM PISTONS** are of heavy ribbed construction fitted with five rings, and full floating piston pins. Sealed compression is attained by locating four rings above piston pins and one ring below.

10—**CONNECTING RODS** are rifle drilled from drop-forged, heat-treated steel. The large ends are machined to receive replaceable precision bushings.

11—**OVERHEAD VALVES** with inserted valve seats and fully enclosed push rods promote high operating efficiency and protection against harmful atmospheric effects.

12—**DUAL CARBURETOR FLEXIBILITY**—Optimum performance under a wide variety of operating conditions is made possible by the dual carburetors on each bank of cylinders. In operation they compensate one another and give precise mixtures as required.

ACCESSORY EQUIPMENT FOR THE V-12 ENGINE

Where required, Climax furnishes a complete range of accessory equipment such as starting devices, air cleaners, filters, radiators, heat exchangers, etc. All of this may be selected to meet the specific needs of the engine application.

Climax Engineering Company

GENERAL OFFICES & FACTORY:
CLINTON, IOWA
REGIONAL OFFICE: DALLAS, TEXAS

PUTTING PERMANENCE IN PIPE

MAYES BROTHERS

INC.

PIPE CLEANING, COATING AND WRAPPING

"Any Coating and Wrapping Specification"

HOUSTON, TEXAS

Complete Reconditioning Service for Old Pipe

•

Every KEROTEST WORKER *proudly* WEARS THIS BADGE OF MERIT

and will continue to earn it!

Every inch of conquered ground on America's far-flung battlefronts represents immeasurable sacrifices—with still greater effort for the final Victory to come.

In full cooperation with these victory achievements, every Kerotest worker holds his production gains and presses always onward to new "ahead of schedule" triumphs in the manufacture of valves, and numerous other strategic products required in our war program.

On every Kerotest worker's lapel is proudly displayed the United States Maritime Commission's Badge of Merit,—enviable recognition of "Well done KEROTEST!"

KEROTEST

MANUFACTURING COMPANY PITTSBURGH, PA.

The Maritime Commission Victory Fleet Flag and the distinguished Maritime "M" Burgee awarded for outstanding production efficiency are proud daily reminders of production goals surpassed and new and greater efforts for Victory.

KEROTEST

Proven Dependability

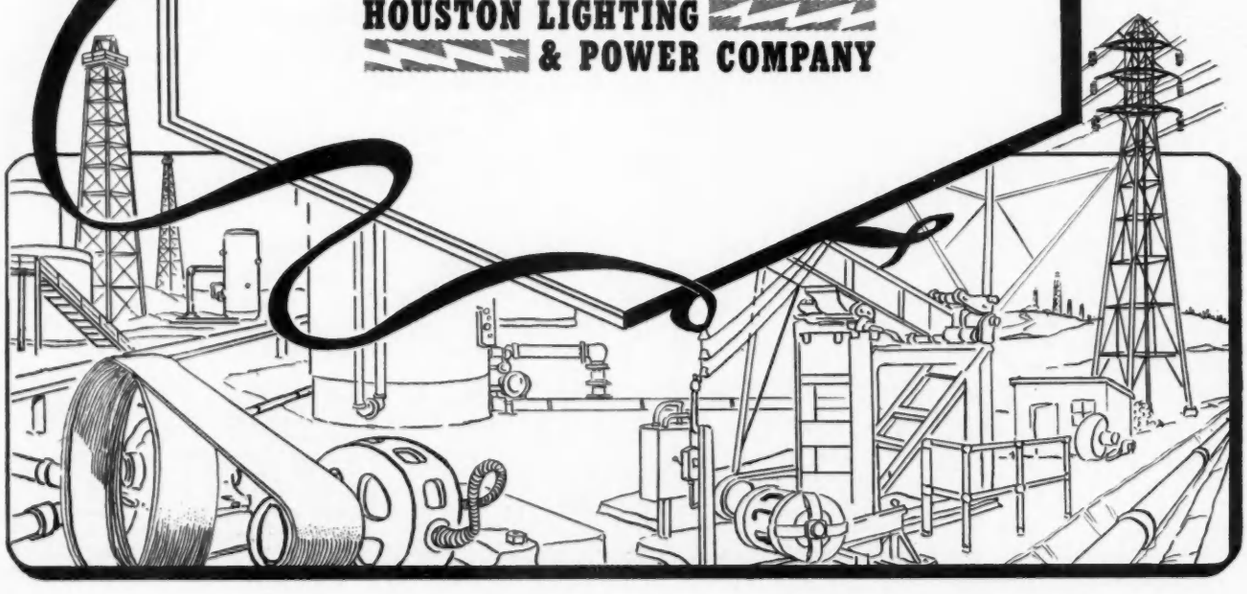
Utility Electric Service

Oil Men have long relied on Utility Electric Service to get the job done. Now—in time of war—they are experiencing that great assurance and comfort that comes of placing reliance on proven dependability.

By years of performance in the petroleum industry Utility Electric Service has earned and established its reputation among oil men, who are glad to place upon it the important responsibility for the successful operation of their war projects.

★

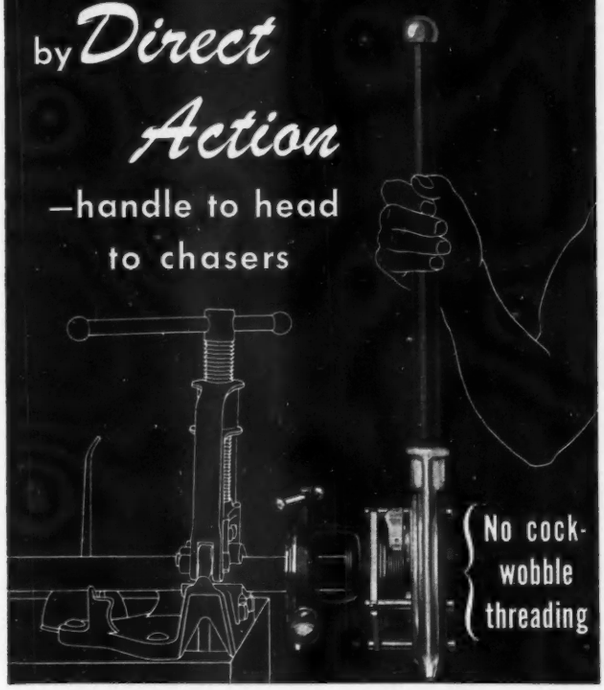
HOUSTON LIGHTING & POWER COMPANY



Smooth Easy Threading

by *Direct Action*

—handle to head to chasers



Floating Posts Carry No Load in this RIDGID Poster Threader

This RIDGID No. 1R die stock gives you faster easier threading of 1" to 2" pipe—its action is direct, in a straight line from handle to head to chasers. No chance for cocking or wobbling, you use less muscle, you cut smoother threads. Posts carry no load, merely taper the threads, and they're separately replaceable. Almost automatic foolproof workholders set to size instantly, speed the work—no bushings to fool with. Alloy or high-speed steel chaser dies. A rugged steel and malleable tool—yours at a popular price. Ask for a RIDGID No. 1R at your Supply House.

This stops waste of priceless time

UNCONDITIONAL GUARANTEE
If this Housing ever Breaks or Distorts we will replace it Free.
COPR. 1937
THE RIDGE TOOL CO.
ELYRIA, O.
TRADE RIDGID MARK

RIDGID wrench housing is *Guaranteed* against break-down and time-out for repairs

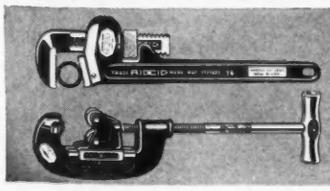
It's no startling news to you that one tool that stays on the job is worth two that fall out for repairs, but it's a critically important fact these days. That RIDGID guarantee makes this wrench doubly valuable now. For the housing, crucial part of any pipe wrench, simply won't break or warp. Adjusting nut, out in the open, *always* spins easily to pipe size. Non-slip jaws that won't lock on pipe, handy pipe scale on hookjaw, powerful comfort-grip I-beam handle. RIDGID *does* save you time, effort—and the cost of "spares." Ask your Supply House for this favorite of millions of users.

Buy RIDGID Pipe Tools at Supply Houses Everywhere

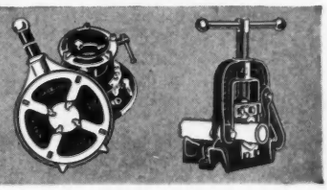
RIDGID

★ PIPE TOOLS ★

THE RIDGE TOOL COMPANY
ELYRIA, OHIO, U.S.A.



Fast-Working Tools for War . . . and the Busy Peace that's Coming



WHY YOU ARE NOT GETTING MARMON-HERRINGTON *All-Wheel-Drive* TRUCKS

● Getting Marmon-Herrington *All-Wheel-Drive* Trucks for any kind of civilian service is almost impossible now—and it is easy to understand.

We appreciate, as well as you, that many civilian jobs are as essential to the successful prosecution of the war, as those of the military—*but, in time of war, the military comes first.*

And shortage of trucks is only half of the story. By far the greater proportion of our factory space and facilities is taken up in the production of tanks and other military vehicles—some of which we are not at liberty to mention.

That is why we are asking all our friends — dealers and users alike—to have patience, to take the best possible care of the Marmon-Herrington equipment you have, and to buy U. S. War Bonds to the limit of your capacity. By so doing you can help your country, yourselves and us—in our combined efforts to win the war and return to our normal pursuits with the least possible delay.

MARMON-HERRINGTON

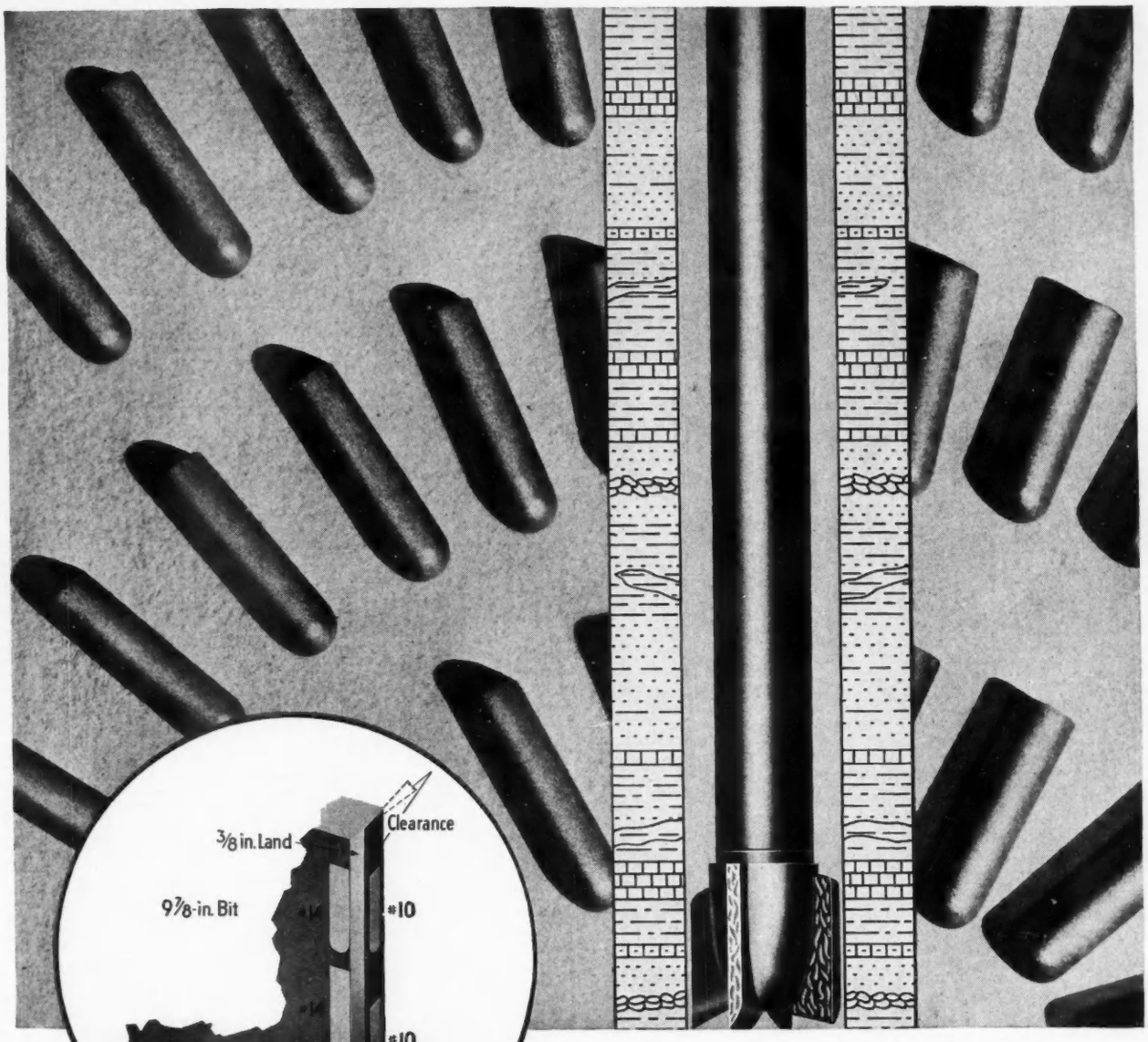
All-Wheel-Drive

MARMON-HERRINGTON CO., Inc., Indianapolis, Indiana

Cable Address: MARTOR

USE HAYSTELLITE INSERTS

for more efficient Drilling Tools



A typical application of Haystellite inserts is shown above.

Haystellite inserts are available in a wide range of types and sizes. One type is shown here, actual size.

HAYNES STELLITE COMPANY

Unit of Union Carbide and Carbon Corporation

New York, N. Y. UCC Kokomo, Indiana

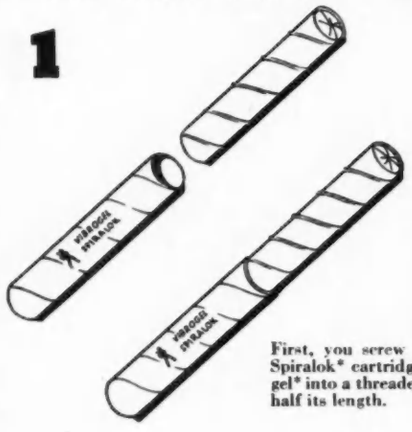
Chicago — Cleveland — Detroit — Houston — Los Angeles
San Francisco — Tulsa

HAYSTELLITE CAST TUNGSTEN CARBIDE DIAMOND SUBSTITUTE

The words "Haystellite" and "Haynes Stellite" are registered trade-marks of Haynes Stellite Company.

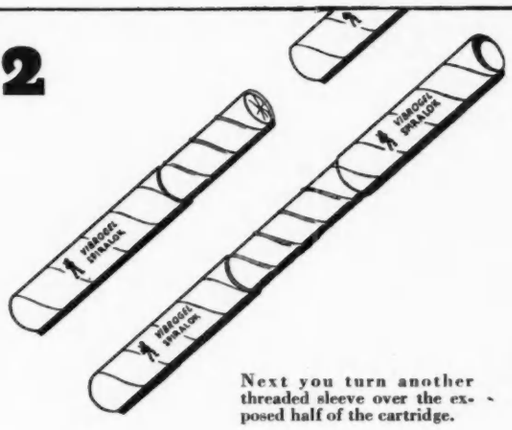
New aid to Seismic Blasting . . . makes loading faster and easier . . . more uniform shots give better records

1



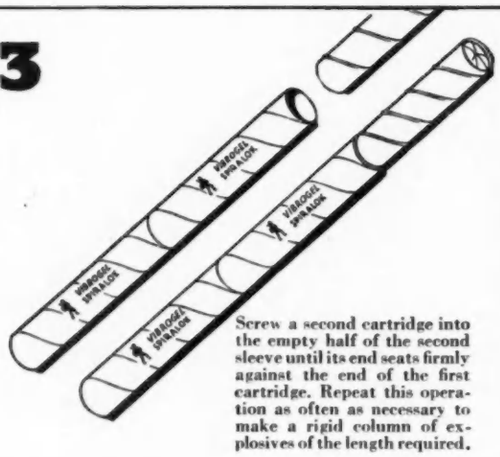
First, you screw a threaded Spiralok* cartridge of Vibrogel* into a threaded sleeve for half its length.

2



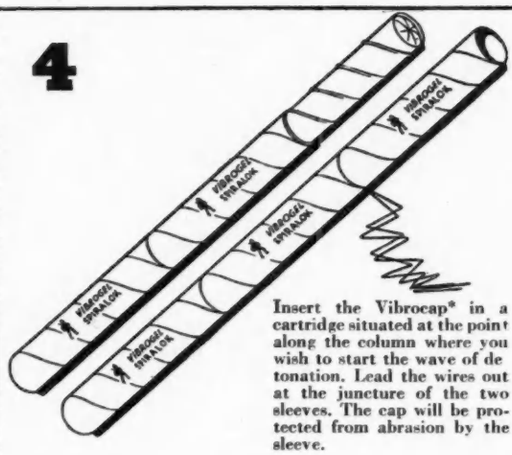
Next you turn another threaded sleeve over the exposed half of the cartridge.

3



Screw a second cartridge into the empty half of the second sleeve until its end seats firmly against the end of the first cartridge. Repeat this operation as often as necessary to make a rigid column of explosives of the length required.

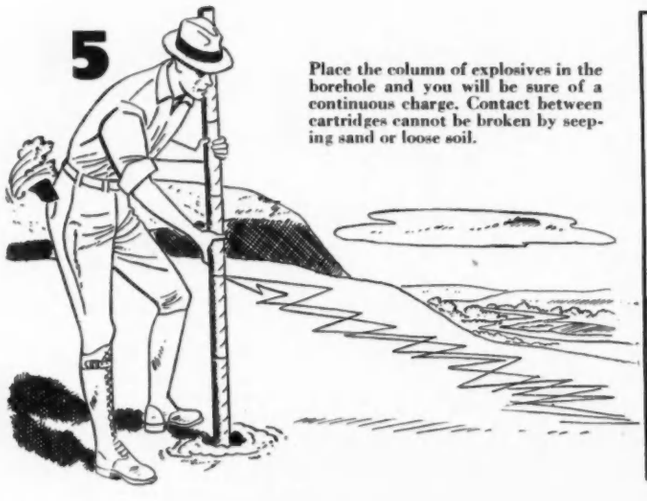
4



Insert the Vibrocap* in a cartridge situated at the point along the column where you wish to start the wave of detonation. Lead the wires out at the juncture of the two sleeves. The cap will be protected from abrasion by the sleeve.

*Reg. U. S. Pat. Off.

5



Place the column of explosives in the borehole and you will be sure of a continuous charge. Contact between cartridges cannot be broken by seeping sand or loose soil.

Ask the Hercules men about Vibrogel in the new shell—

SPIRALOK

HERCULES POWDER COMPANY
INCORPORATED

935 King Street, Wilmington, Delaware

N-26

In the manner to which you are accustomed!

It's not just luck or good fortune that is enabling the COOPER organization to supply the Oil Industry with much needed power engines and well servicing equipment. For the past twenty-four years all the efforts of this organization have been devoted to doing one job, and doing it well—that is, to provide more efficient means of pumping oil wells and maintaining them in producing condition and to supply parts and service for this equipment when needed.

At present there aren't as many Cooper Engineers in the field as we would like to have, but those who are out are capable, efficient power engine and pulling unit service men. They can recommend the proper type of new equipment to take care of your requirements and assist in maintaining your present equipment in top operating condition. It makes no difference how long you have had your Allis-Chalmers Engines, Skid Winches or Winch Tractors; standard parts are available.

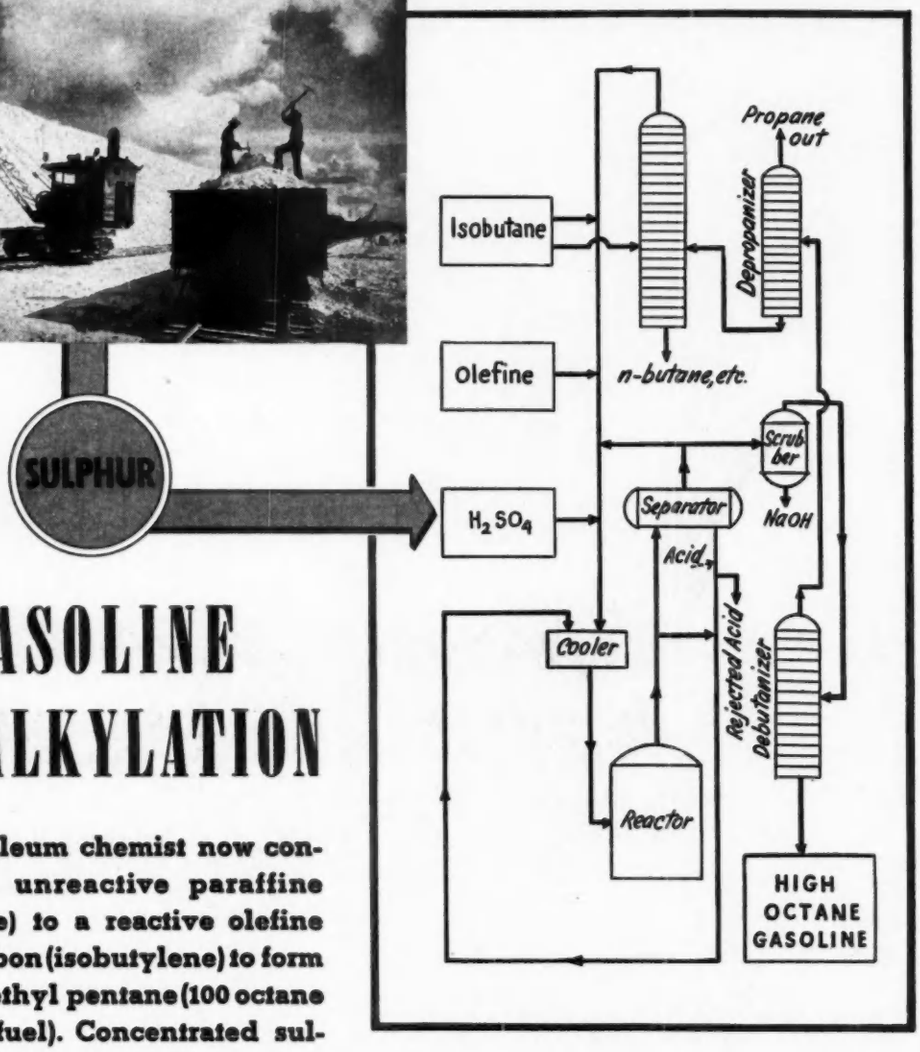
ENGINES AND PARTS AVAILABLE

Condensed Specifications of Allis-Chalmers Engines

MODEL	L	E	U	W	B
Number of Cylinders	6	4	4	4	4
Bore and Stroke, Inches	5¼x6½	5¼x6½	4½x5	4x4	3¼x3½
Piston Displacement, Cubic Inches	844	563	318	201	116
R.P.M., Operating Range, Continuous	600–1200	600–1200	700–1200	800–1300	900–1400
Torque	590	400	200	128	74
Fuel	Butane, Nat'l Gas, Gasoline, Distillate	Butane, Nat'l Gas, Gasoline, Distillate	Butane, Nat'l Gas, Gasoline, Distillate	Butane, Nat'l Gas, Gasoline, Distillate	Butane, Nat'l Gas, Gasoline, Distillate
Cylinders Replaceable (wet sleeve)	Yes	Yes	Yes	Yes	Yes
Location Valves	In Head	In Head	In Head	In Head	In Head
Valve Guides Removable	Yes	Yes	Yes	Yes	Yes
Main Bearings, Number	4	3	3	3	3
Total Area (Actual) Square Inches	143.73	110.70	59.88	39.92	32.68
Oil Pump Drive	Crankshaft	Crankshaft	Crankshaft	Camshaft	Camshaft
Oil Capacity, Gals., P.M. at Normal Gov. R.P.M.	5	4	3	2	2
Crankcase Oil Capacity, U. S. Quarts	24	14	10	6	4
Oil Filter	Purolator	Purolator	Own	Own	Own
Air Cleaner	Oil Bath	Oil Bath	Oil Bath	Oil Bath	Oil Bath
Governor	Own	Own	Own	Own	Own
Type	Centrifugal Var. Speed Impeller	Centrifugal Var. Speed Impeller	Centrifugal Var. Speed Impeller	Centrifugal Var. Speed Impeller	Centrifugal Var. Speed Impeller
Water Pump, Type	108 Gals. P.M.	71 Gals. P.M.	48 Gals. P.M.	23.9 Gals. P.M.	12.4 Gals. P.M
Capacity, 1 ft. head, Normal R.P.M.	Autolite	Autolite	Autolite	Delco-Remy	Delco-Remy
Electric Starting	Dry Disc	Dry Disc	Dry Disc	Dry Disc	Dry Disc
Clutch, Standard					

FRED E. Cooper
Hale Station, TULSA, OKLAHOMA
PHONE 7191 BOX 1890
BRANCH—9619 South Main St. - - - - - - - Los Angeles
BRANCH—1418 Franklin St. - - - - - - - - - - Houston

HOW SULPHUR SERVES INDUSTRY



GASOLINE BY ALKYLATION

The petroleum chemist now connects an unreactive paraffine (isobutane) to a reactive olefine hydrocarbon (isobutylene) to form 2,2,4 trimethyl pentane (100 octane aviation fuel). Concentrated sulphuric acid is the active agent which joins the two together. The process is called alkylation.

The petroleum industry uses Sulphur and its compounds in various ways. Sulphuric acid has long been used in refining kerosene, gasoline, and lubricating oils. Sulphur dioxide is also used as a refining agent and can also be combined with petroleum products to form plastics. Sulphur as such is used in refining gasoline and in making cutting oils and extreme pressure lubricants. Sulphur and its compounds are extremely useful to the petroleum industry. And, the Texas Gulf Sulphur Company has ready for shipment the Sulphur to meet all its needs.

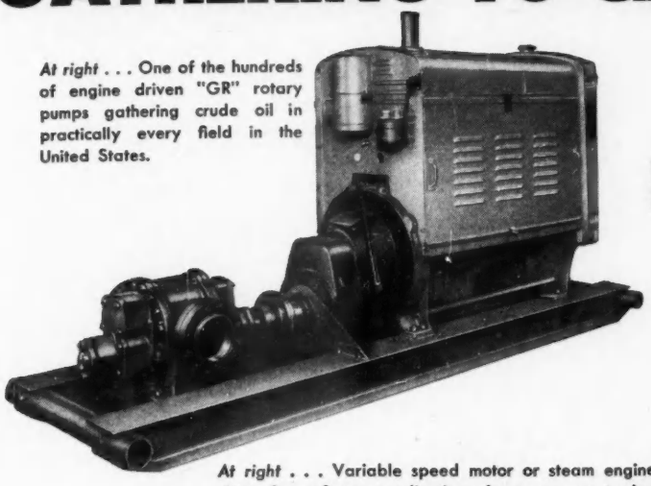
TEXAS GULF SULPHUR COMPANY, INC.

PRODUCERS OF CRUDE SULPHUR

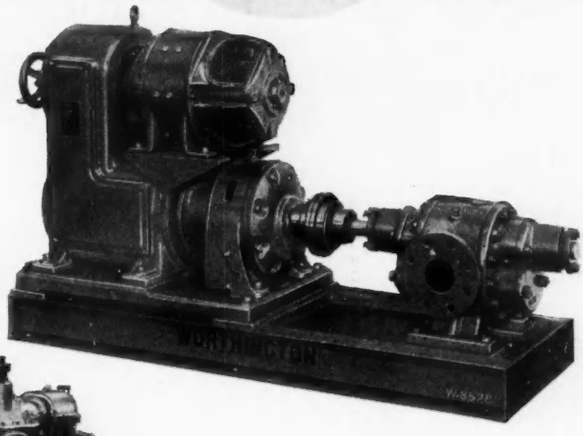
A GOOD NEIGHBOR *A GOOD CITIZEN*

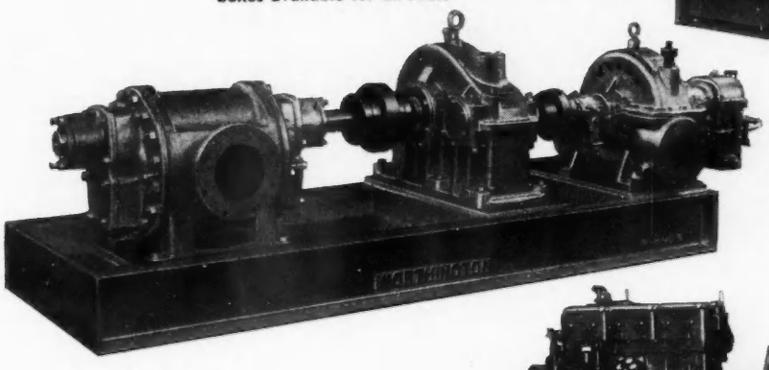
From GATHERING TO CARGO LOADING "G R" Rotary Pumps

At right . . . One of the hundreds of engine driven "GR" rotary pumps gathering crude oil in practically every field in the United States.



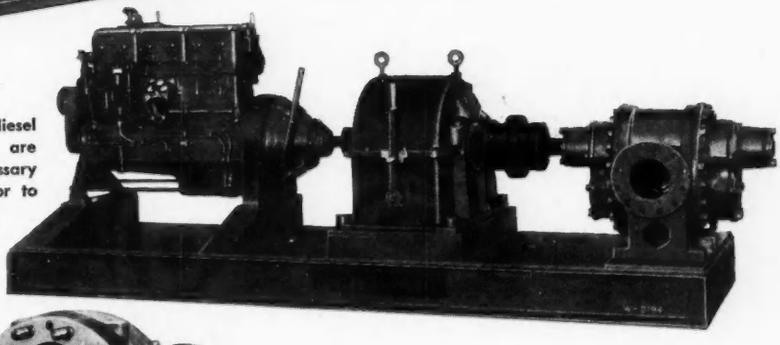
At right . . . Variable speed motor or steam engine drive for refinery applications from greases to hot asphalts or bright stocks. Jackets for bodies or stuffing boxes available for all sizes.





At left . . . Where steam is available to drive these cargo loading pumps Worthington-Moore steam turbines are supplied. This permits variable speeds often required.

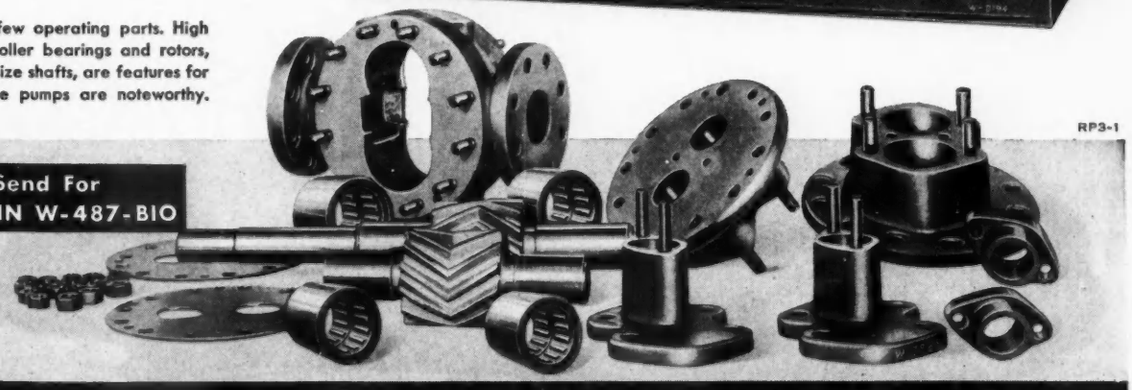
At right . . . Two-speed geared with diesel engine or two-speed motor drives are popular for cargo loading where necessary to pump oils of varying viscosities, or to pump out a cold line.



Note the few operating parts. High capacity roller bearings and rotors, and over-size shafts, are features for which these pumps are noteworthy.

RP3-1

Send For
BULLETIN W-487-BIO



WORTHINGTON

WORTHINGTON PUMP & MACHINERY CORPORATION • GENERAL OFFICES: HARRISON, N. J.

CONDENSED STATEMENT OF CONDITION AT THE CLOSE OF BUSINESS DECEMBER 31, 1942

UNITED STATES DEPOSITORY

As Reported to the Comptroller

RESOURCES

CASH	$23,475,749.98	
UNITED STATES SECURITIES	21,379,165.63	$44,854,915.61
Municipal Bonds and Other Securities		5,318,122.28
Loans and Discounts		8,436,916.45
Second National Bank Building		1,000,000.00
Real Estate, Vaults, Furniture and Fixtures		223,998.86
Interest Accrued on Investments		109,418.96
Customers' Liability under Letters of Credit		294,421.95
Customers' Liability under Acceptances		179,578.05
Other Resources		1,020.27
		$60,418,392.43

LIABILITIES

Capital Stock — Common	$ 1,000,000.00	
Surplus	1,000,000.00	
Undivided Profits	1,000,000.00	
Reserved for Dividends, Interest, Taxes and Other Purposes	519,441.27	$ 3,519,441.27
Letters of Credit		294,421.95
Acceptances		179,578.05
Deposits:		
Individual	41,929,703.79	
Banks (Net)	8,620,062.40	
United States	5,875,184.97	56,424,951.16
		$60,418,392.43

OFFICERS

B. D. HARRIS, President
L. R. BRYAN, JR., Executive Vice President

H. M. SEYDLER, Active Vice President
GEORGE M. IRVING, Active Vice Pres. & Tr. Officer
HERBERT M. ROWE, Active Vice Pres. & Comptroller
HUGH J. BERNARD, Active Vice Pres. & Cashier
THOS. C. SPENCER, Vice President
R. E. WILLIAMS, Assistant Vice President
P. C. PATTERSON, Assistant Vice President
KYLE S. HAMBLEN, Assistant Cashier
A. M. BALL, Assistant Cashier
T. J. O'BRIEN, Assistant Cashier
PAUL BARKLEY, Assistant Cashier
W. R. GARRISON, Assistant Cashier

**BENTON F. HILL, Auditor

TRUST DEPARTMENT

GEORGE M. IRVING, Active Vice President and Trust Officer
**HOMER E. HENDERSON, Trust Officer
J. W. THIGPEN, Assistant Trust Officer
HARRY E. RICHARDS, Real Estate Officer

BOND DEPARTMENT

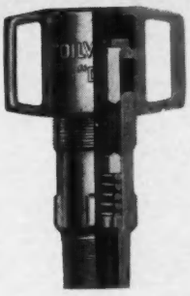
R. E. WILLIAMS, Assistant Vice President and Manager

Note: **With United States armed forces.

The Second National Bank of Houston

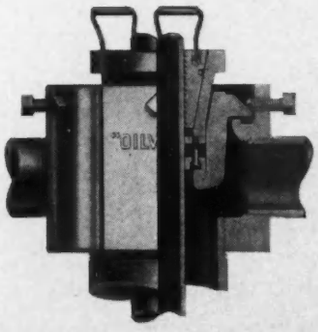
Member Federal Deposit Insurance Corporation

HOUSTON, TEXAS



"OILWELL" MODEL "D" STUFFING BOX

Simple and compact with low overall height . . . Parts and stuffing-box rings interchangeable through entire range of tubing sizes . . . Constant compression of packing by strong interchangeable spring . . . Extra-long top gland . . . Large oil reservoir.



"OILWELL" OCTAGON (TYPE 38) CASING HEAD

(Illustrated with "Oilwell" Slip-Suspension Tubing Hanger—Type "C")

Convenient octagonal body with straight sides and low overall height . . . Eight set screws help distribute pressure on packing . . . Semi-steel or cast-steel to suit well requirements.

"OILWELL" SLIP-SUSPENSION TUBING HANGER —TYPE "C"

Simple, sturdy construction . . . Hardened steel slips with convenient lifting handles . . . One-piece unitized packing element.

"OILWELL" FORGED-STEEL PIPE SADDLES

Drop-forged steel bodies *fit the pipe accurately* . . . One-, two-, and three-clip styles with round or flat clips . . . Wide range of sizes with tapped or blind outlets.

"OILWELL" FORGED-STEEL SAFETY "C" LINK

Light weight and convenient handle make "hooking-on" an easier, safer job. This "C" link is representative of "Oilwell's" extensive line of knock-off equipment, including throw-off hooks, "B" links, knock-off blocks, turnbuckles, and dozens of other items designed to suit particular needs.

From pumping units to stuffing-box rings—

YOU CAN RELY ON "OILWELL" FOR DEPENDABLE PRODUCTION EQUIPMENT

WHEN you put a piece of equipment on a well, you want to know that it is worth its salt—that it will give you its full share of reliable service. The quality that results in just that kind of performance is built into all "Oilwell" production equipment, from the largest item of machinery to the smallest part or accessory. All "Oilwell" products receive the same careful attention to design, material and workmanship.

Illustrated on this page are a few of the many items comprising "Oilwell's" extensive line of production equipment. The next time you're planning the equipping of a well or an entire lease, stop at the nearest "Oilwell" store. Friendly, competent supply men will gladly show you what they can furnish for your particular applications.

OIL WELL SUPPLY COMPANY

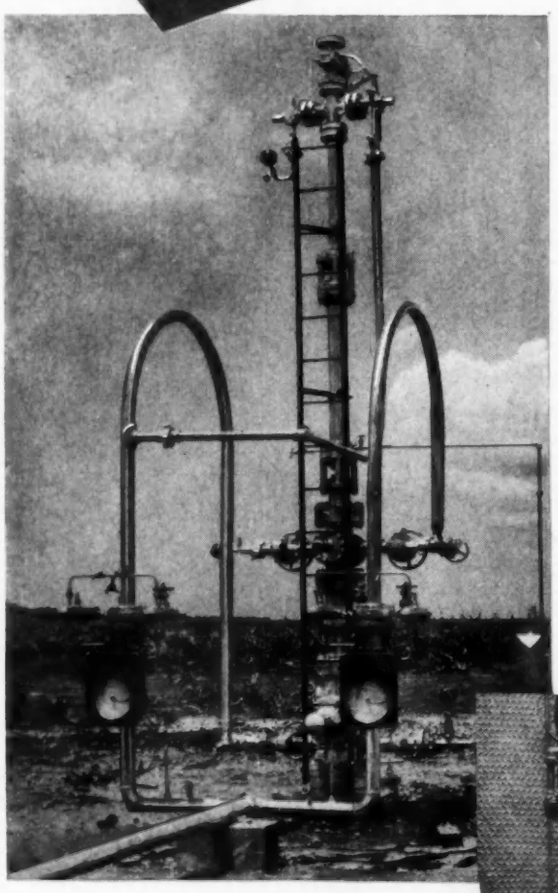
EXECUTIVE OFFICE—DALLAS, TEXAS
DIVISION OFFICES—OIL CITY, PA.
DALLAS, TEXAS LOS ANGELES, CALIF.

Branch Stores Serving All Oil Fields
United States Steel Corporation Subsidiary

EXPORT DIVISION OFFICE—
30 ROCKEFELLER PLAZA
NEW YORK CITY

SIMPLIFICATION ★ A VICTORY AID!

All 9 Lives!



MAINTENANCE IS A SIMPLE MATTER—if and when it is necessary for a Metric-American meter. Continuous engineering development has reduced its construction to the fewest number of parts practicable.

For example, there is only one moving part between mercury surface and chart record. (Our sylphon-actuated orifice meter, with spring-loaded bellows replacing the usual mercury manometer, is applicable where mercury use is inadvisable.)

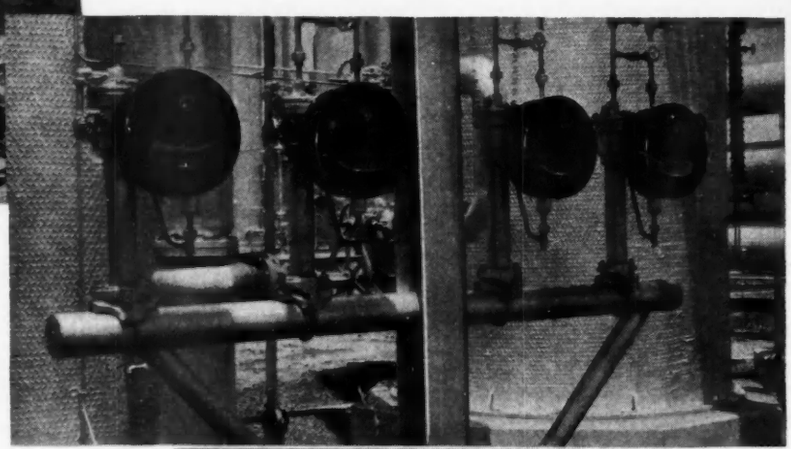
Ruggedness of construction throughout, eliminates any great problem of keeping Metric-American meters fit. Connections between chambers of the differential gage body are both screwed and welded. . . . No detail is overlooked.

What is most to the point ... Metric-American meters and flowmeters not only bear up under toughest service conditions, but also *hold their accuracy* ... without pampering. Given regular inspection, you can count upon any American instrument to last its full "nine lives". Actual performance records ... thousands of field reports ... all prove this.

Metric-American orifice meters installed near well head.

☆ ☆

Right ... A group of Metric-American indicating flowmeters.



METRIC METAL WORKS • ERIE, PENNSYLVANIA

AMERICAN METER COMPANY

INCORPORATED (ESTABLISHED 1836)

MEASUREMENT ENGINEERING AND PROCESS CONTROL

For the asking: bulletins that will acquaint you with all Metric-American instruments for flow measurement and control of gases, air, steam, oil and other fluids.

WILDCATS CAN BE DRILLED FOR 25% LESS TODAY!

From the Files of a Major Operator:

THE OLD METHOD

WELL "A"

Location: South Louisiana
Date Drilled: 1941
Total Depth: 9000′
Cores: Conventional; every other ten feet.
Drilling Cost: $105,000.00

THE MODERN METHOD

WELL "B"

Location: South Louisiana
Date Drilled: 1941
Total Depth: 9800′
Cores: None—Electrically logged and side wall sampled by Schlumberger
Drilling Cost: $65,000.00

The above comparison of drilling costs reflects a high percentage of saving due to the very favorable conditions encountered in South Louisiana where oil may be found from "grass roots" to any depth. In territories where more definite objectives exist an average saving of 25% should prove conservative.

SCHLUMBERGER

Originators of Electrical Well Logging

AT WAR against RUST

RUST-BAN*

*Registered U. S. Pat. Off.

The war against Rust goes on in every land. Wherever iron and steel are used, there are the battle fronts. Today this battle is more important than ever before. Vital, irreplaceable equipment must be protected.

Rust-Ban*, the most complete line of rust preventives on the market, is meeting this world wide challenge. Rust-Ban products are protecting petroleum handling, producing and refining equipment under practically every service condition known to man.

For more details about Rust-Ban, write your nearest Rust-Ban marketer.

RUST-BAN is sold: In New York and New England by Colonial Beacon Oil Co., New York City ✶ In Pennsylvania by Standard Oil Co., of Pennsylvania, Philadelphia, Pa. ✶ In New Jersey, Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina and South Carolina by Standard Oil Company of New Jersey, New York City ✶ In Arkansas, Louisiana, Tennessee by Standard Oil Company of Louisiana, New Orleans, La. ✶ In Texas by Humble Oil & Refining Company, Houston, Texas ✶ In Oklahoma, Colorado, Iowa (west of Des Moines), Nebraska and Kansas and parts of Missouri by The Carter Oil Company, Tulsa, Oklahoma ✶ In Kentucky, Georgia, Florida, Alabama and Mississippi by Standard Oil Company (Ky.), Louisville, Kentucky ✶ In Arizona, California, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming by Gilmore Oil Company, Los Angeles, Cal. ✶ In other states, Alaska and Hawaiian Islands by Penola Inc., Pittsburgh, Pa. ✶ In Canada by Imperial Oil Ltd., Toronto, Canada.

RUST-BAN—the most complete line of rust preventives on the market

HOW AND WHY

WILLIAMS' TOOLS AID WAR PRODUCTION

DATA ON "VULCAN" EYE BOLTS

● Eye Bolts are used extensively to facilitate the moving, installation and handling of machines, equipment, gigs, etc. Many designers place Eye Bolts at strategic locations on their machines to eliminate hazardous stresses that would cause torsional weave or misalignment of critical sections or surfaces. In addition to these common industrial uses, Eye Bolts are today widely used on such war equipment as guns, tanks and boats for lifting and towing purposes. Eye Bolt failure, in addition to endangering life, may cause damage to delicate or costly mechanisms. *Strength* and *Safety* are therefore the fundamental essentials of Eye Bolt design.

Williams' "Vulcan" Eye Bolts are weldless, being drop-forged from a solid blank of carbon steel. After forging they are heat-treated to further increase their strength and toughness and reduce liability of breakage. Every "Vulcan" Eye Bolt is then individually proof-tested on a standard tension machine to *fifty percent beyond* its rated "safe working load." Each Eye Bolt so tested and approved is stamped with the circular identifying mark shown in the illustration at left.

The following data is intended to help users in the selection of available standard patterns and sizes. These "Vulcan" Eye Bolts can be furnished blank, from stock. Plain and Shoulder Patterns are carried in stock threaded U. S. Std., but Miscellaneous Patterns must be threaded to order.

SHOULDER PATTERN "VULCAN"

No.	Shank: Diam.; Nominal Rough Size; Blank	Shank: Std. Lgth. under Shldr. Blank and Thd.	Shank: Maximum Lgth. in Stock; Blank	Eye, Diameter: Inside	Eye, Diameter: Outside	Capacity Blanks; Tons of 2000 lbs.: Safe Working Load	Capacity Blanks; Tons of 2000 lbs.: Breaking Strain, Apprx.
21	1/4	1	3	3/4	1 3/16	.2	1.5
22	5/16	1 1/8	4	7/8	1 7/16	.4	2.
23	3/8	1 1/4	4 1/2	1	1 21/32	.7	3.
24	7/16	1 3/8	4 1/2	1 3/32	1 27/32	1.	4.
25	1/2	1 1/2	4 1/2	1 3/16	2 1/16	1.3	5.
26	9/16	1 5/8	4 1/2	1 9/32	2 9/32	1.5	6.
27	5/8	1 3/4	4 1/2	1 3/8	2 1/2	2.	8.
28	3/4	2	5	1 1/2	2 13/16	3.	12.
29	7/8	2 1/4	5	1 11/16	3 1/4	3.5	16.
30	1	2 1/2	5	1 13/16	3 9/16	4.	20.
31	1 1/8	2 3/4	5	2	4	5.	23.
32	1 1/4	3	6	2 3/16	4 7/16	7.5	33.
34	1 1/2	3 1/2	6	2 1/2	5 3/16	9.	42.
35	1 3/4	3 3/4	6	2 7/8	6 1/16	11.	53.
36	2	4	6	3 1/4	6 7/8	13.	68.

PLAIN PATTERN "VULCAN"

No.	Shank: Diam.; Nominal Rough Size; Blank	Shank: Std. Length under Eye, Blank and Thd.	Shank: Maximum Length in Stock; Blank	Diameter Eye: Inside	Diameter Eye: Outside	Capacity Blanks; Tons of 2000 lbs.: Safe Working Load	Capacity Blanks; Tons of 2000 lbs.: Breaking Strain, Apprx.
3	3/8	1 1/4	4 1/2	1	1 21/32	.7	3.
4	7/16	1 3/8	4 1/2	1 3/32	1 27/32	1.	4.
5	1/2	1 1/2	4 1/2	1 3/16	2 1/16	1.3	5.
6	9/16	1 5/8	4 1/2	1 9/32	2 9/32	1.5	6.
7	5/8	1 3/4	4 1/2	1 3/8	2 1/2	2.	8.
8	3/4	2	5	1 1/2	2 13/16	3.	12.
9	7/8	2 1/4	5	1 11/16	3 1/4	3.5	16.
10	1	2 1/2	5	1 13/16	3 9/16	4.	20.
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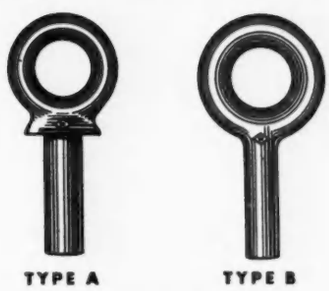

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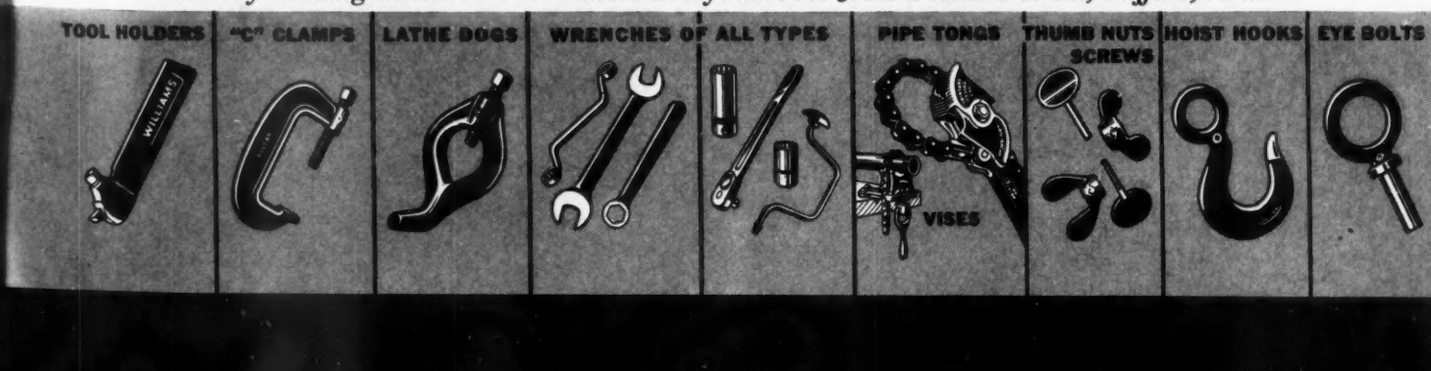

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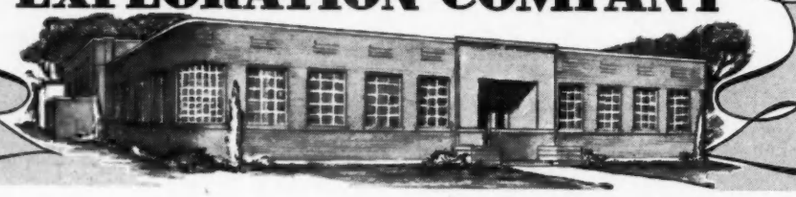

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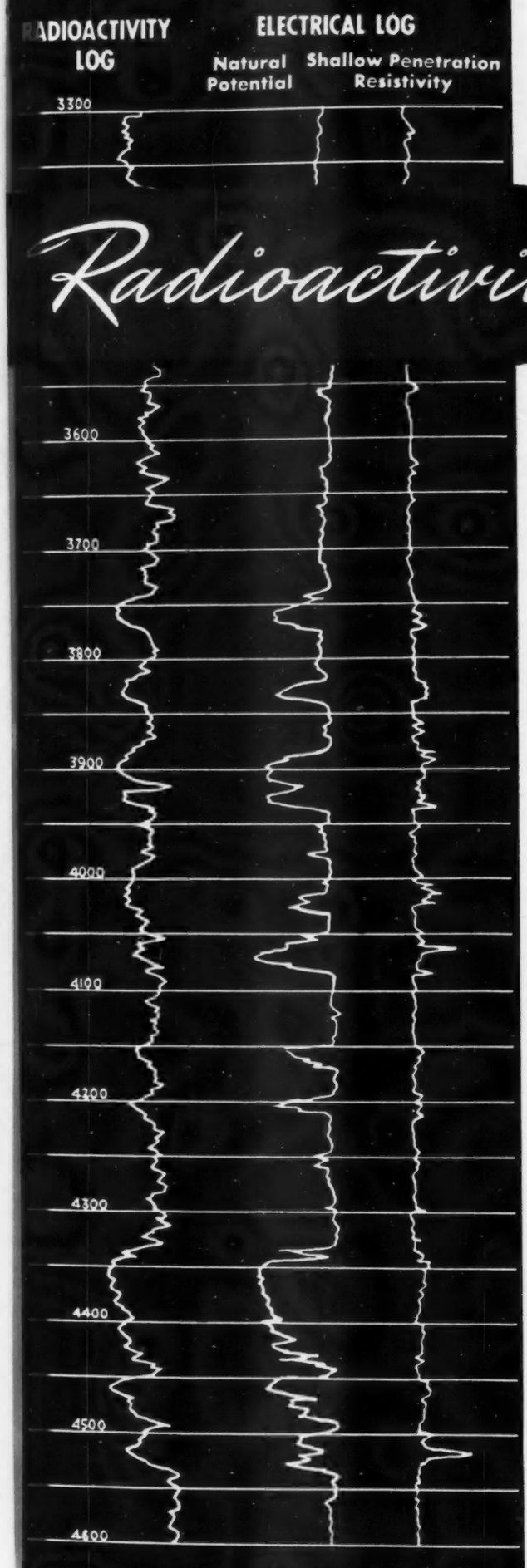

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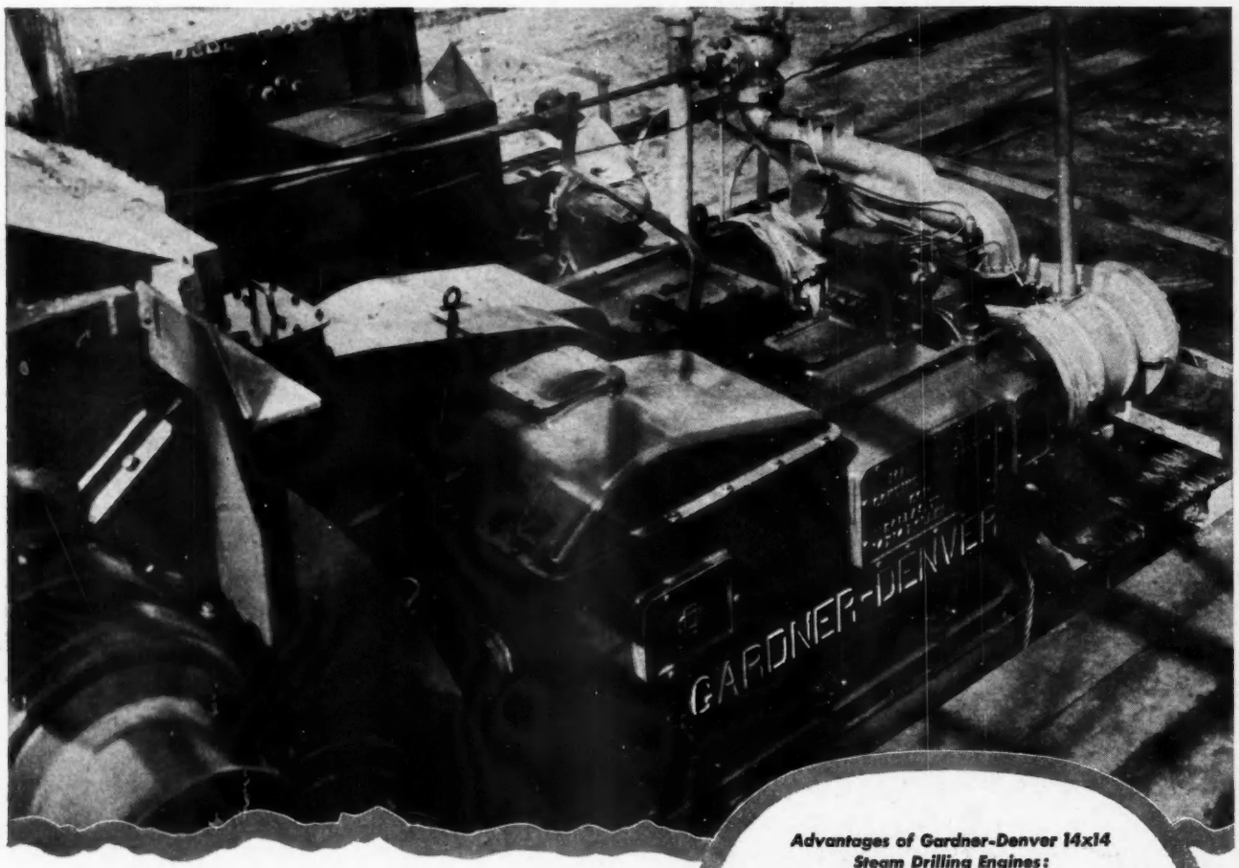

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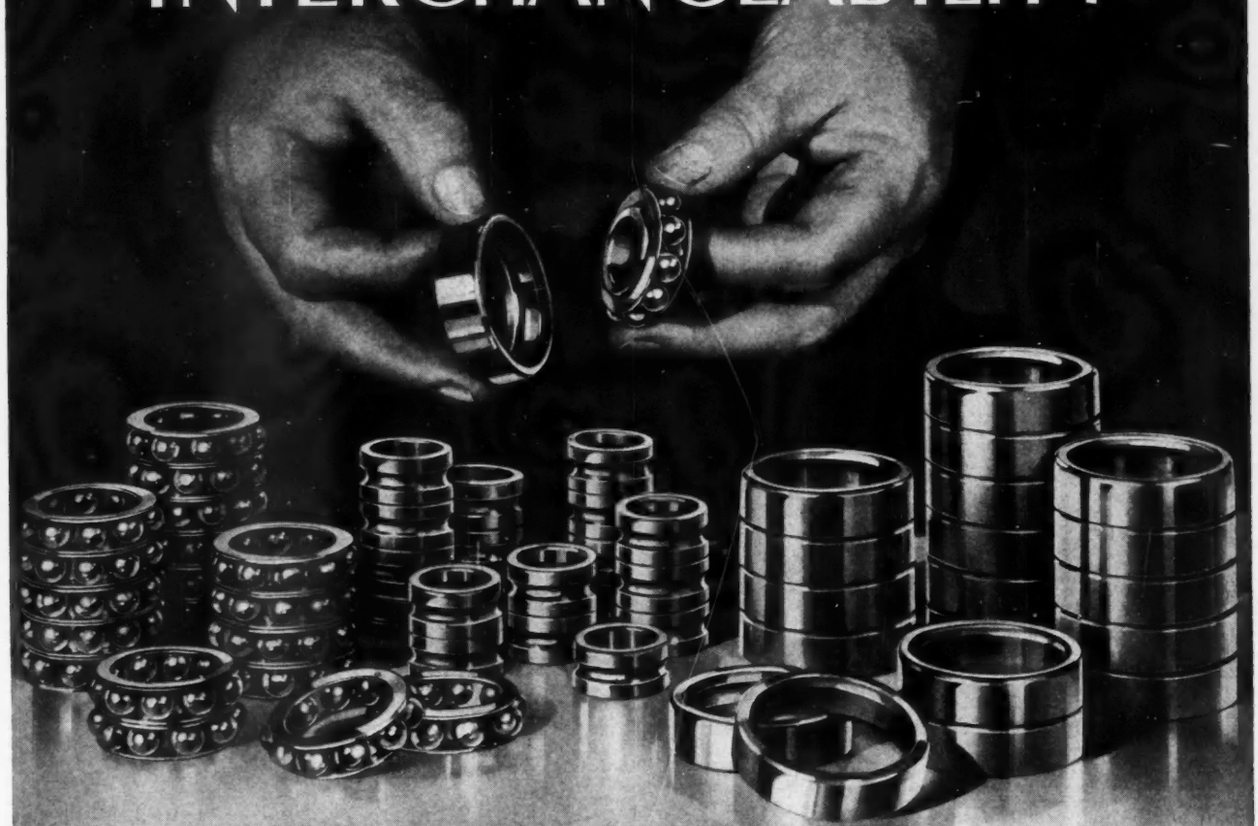

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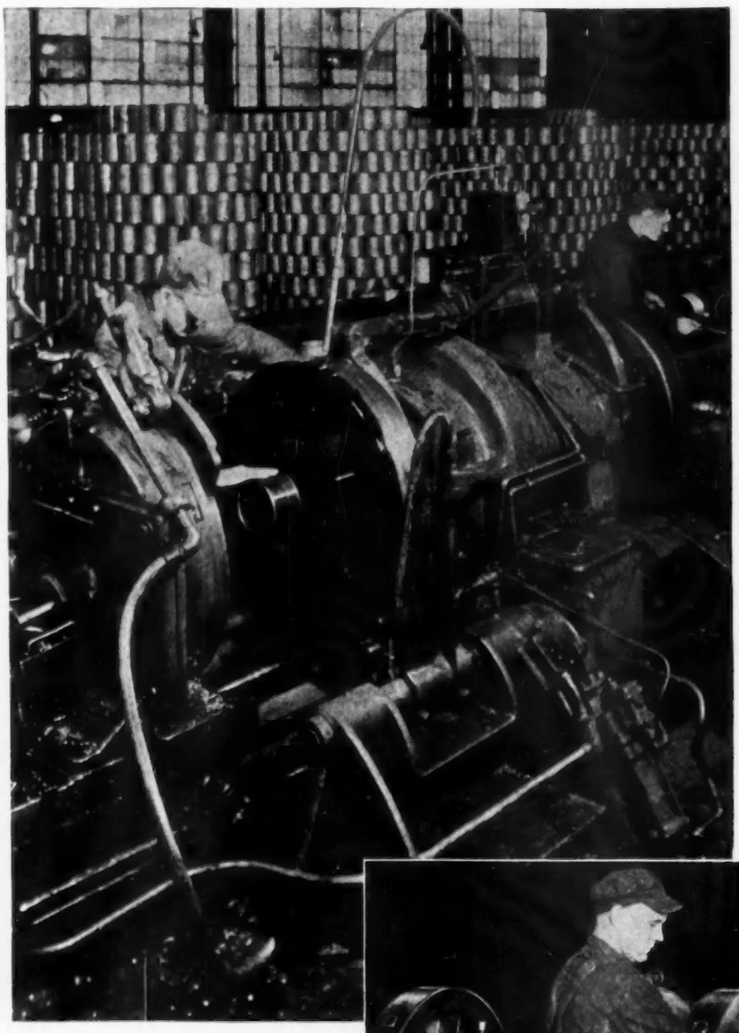

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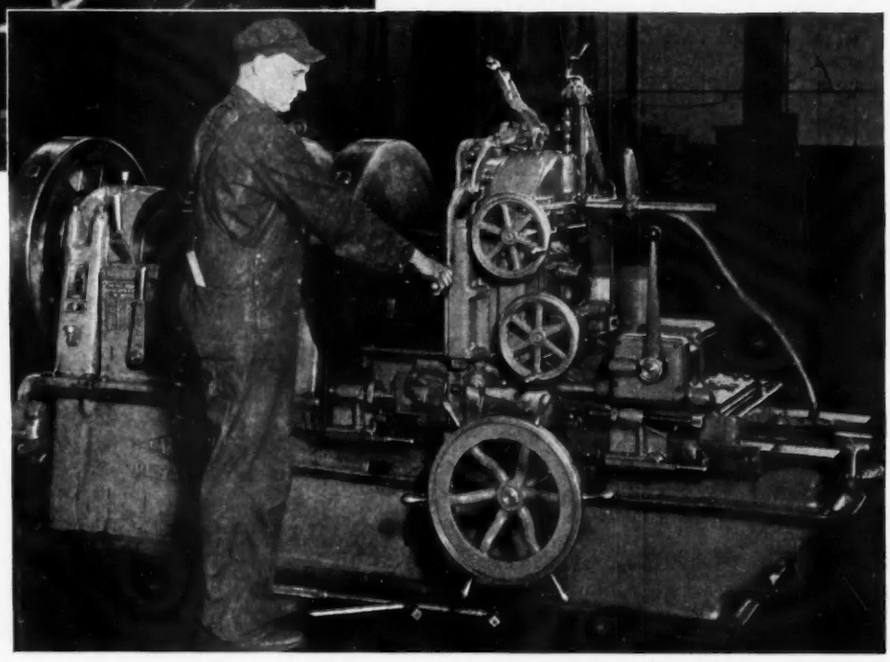

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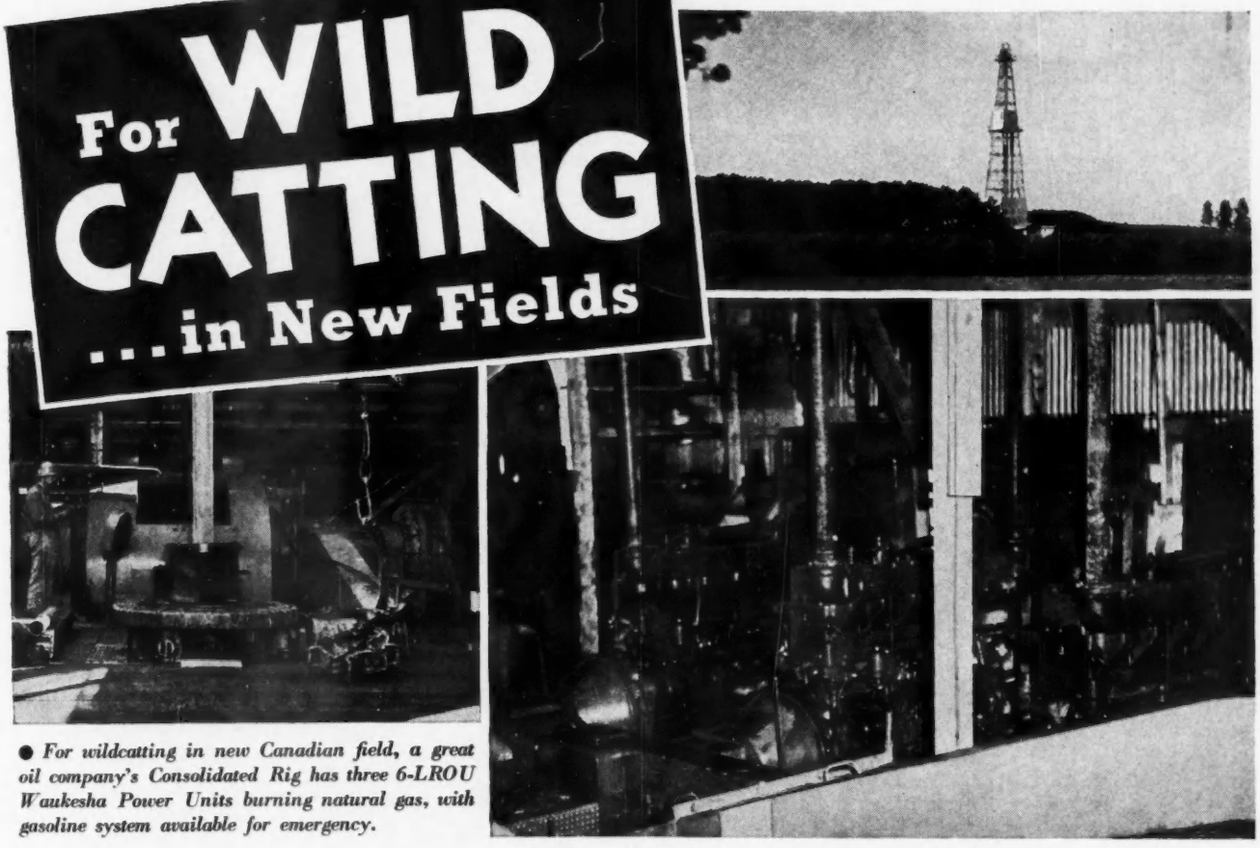

● *For wildcatting in new Canadian field, a great oil company's Consolidated Rig has three 6-LROU Waukesha Power Units burning natural gas, with gasoline system available for emergency.*

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Convertible from Natural Gas to Gasoline ...without interrupting operations

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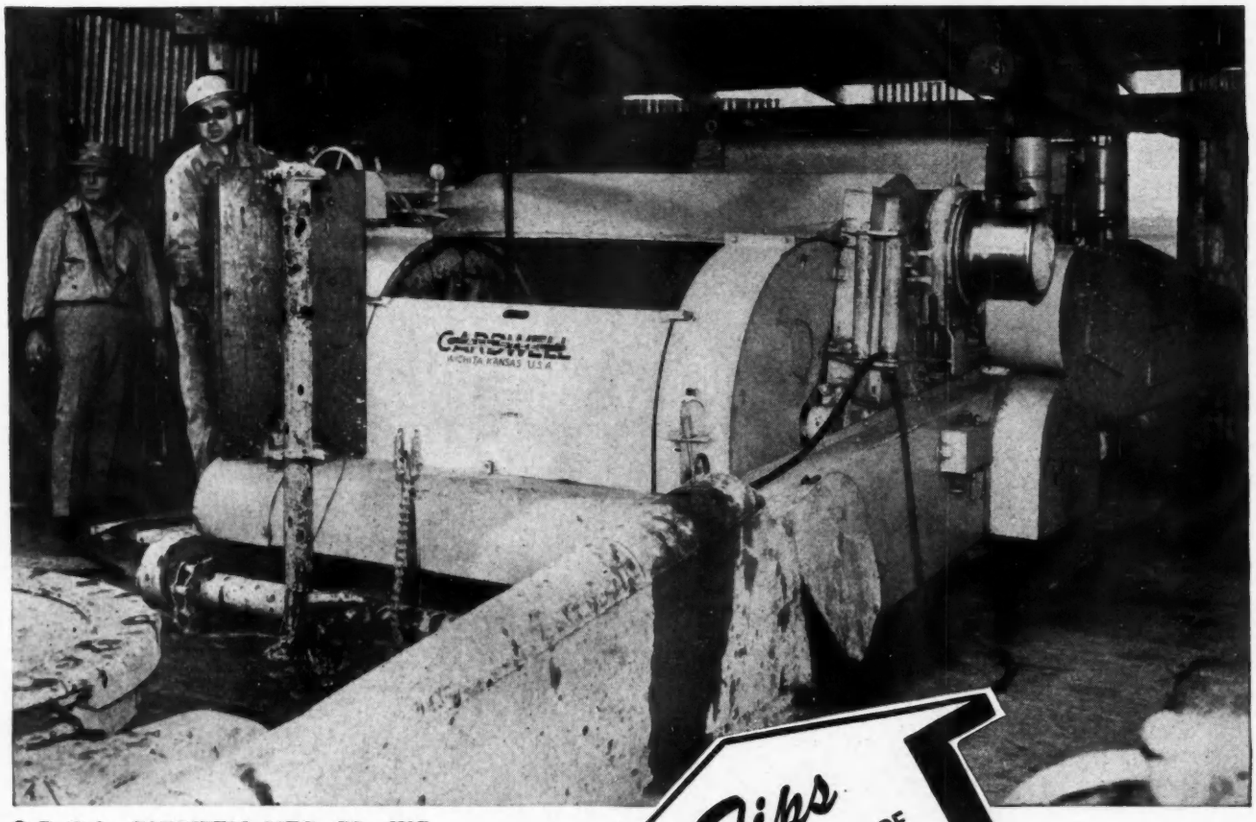

● *Built by* CARDWELL MFG. CO., INC.

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2. Avoid loads and speeds beyond those recommended by the manufacturer.
3. If necessary to remove bearings, keep them properly lubricated. Avoid the intrusion of water and dirt. Apply pressure on the inner race only. Don't hammer outer race.
SKF
BALL AND ROLLER BEARINGS

THE OIL WEEKLY

Year Book

Forecast Number Editorial Subject Index

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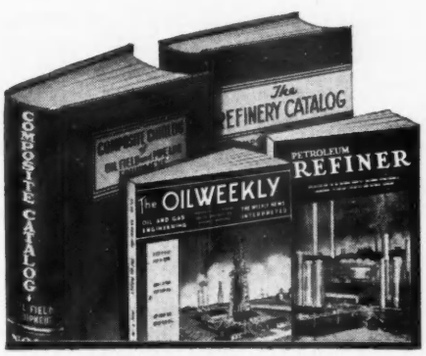

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FEB. 4	National Oil Scouts and Landmen's Association, Dallas, Texas.
15–18	American Institute of Mining and Metallurgical Engineers, New York.
APR. 8–9	American Petroleum Institute, Division of Production, Eastern District, Wm. Penn Hotel, Pittsburgh.
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The Changing Panorama

1942-1943

JUST as the military fortunes of the United Nations have taken a sharp turn for the better, the outlook for the petroleum industry, largely built and owned by these countries, has become definitely more optimistic.

The United Nations are beginning to see victory ahead, and the petroleum industry not only deals with increased confidence with the immediate job of winning the war but also begins to catch glimpses of the opportunities and responsibilities of the post-war period.

After having been somewhat stunned by the blows dealt it in the earlier part of 1942, the oil industry of the United States and other United Nations has become remarkably well adjusted to war, and there is now less groping around and more driving toward definite goals.

The industry has gained through a year of experience a full comprehension of its responsibilities in winning the war and has gone far toward fulfillment of those responsibilities.

It will produce the crude oil needed, despite the handicap of material and equipment shortages, and will turn out the ordinary and special petroleum products required to the full extent of the possibilities afforded under the wartime shortages of materials and manpower.

And when the war has been won, the industry will have before it opportunities and potential markets greater than any offered by the world before it entered upon this war.

World Production . . .

In line with the visions of victory and more optimistic outlook for the oil industry, world production of crude oil probably will increase around 5 percent in 1943, in reflection of an indicated expansion of about that proportion or more in United States output. Such an increase would wipe out half of the sharp decrease in world production in 1942.

The world output probably was a little under 2,000,000,000 barrels in 1942, down 10 percent from the all-time high reached in 1941, and back to the 1938 level, as the three top ranking countries, the United States, Russia, and Venezuela, recorded declines, while large production was wiped out in the East Indies by the Dutch, British, and Americans in advance of the Japanese invasion.

Record Demand Likely . . .

Importantly responsible for the gain in world production which is in prospect is the anticipated increase of 5 to 7 percent in the total demand for all oils in the United States in 1942. If that expectation materializes, a new record will be set, as the demand was off only 2 percent in 1942 from the all-time peak of 1941.

The anticipated expansion in petroleum use is based upon such factors as: enlarged exports to fighting fronts; further increases in residual fuel oil usage by shipping, naval, industry and railroad activity; continued gains in use of distillate fuel oil as transportation facilities to East Coast are improved; a sharp upward rise in aviation gasoline needs as Allied air forces grow; enlarged importance of toluene, lubricants, greases and other special oils used in the war; the additional market obtained when synthetic rubber plants begin operating; and further improvements in inland transportation facilities that will permit larger deliveries to the East Coast, whether for domestic or export use.

These factors are expected to more than compensate for the retarding influence of curtailed automobile consumption.

The increase in demand rates will come rather gradually but steadily throughout the year. During the first quarter, usage will be less than in the corresponding period of 1942, but later gains should more than offset this slow start.

U. S. Output Down . . .

In totaling 1,385,347,000 barrels in 1942, United States crude oil production was down only 1.3 percent from the all-time record of 1,404,182,000 barrels established in 1941, despite the war's serious interference with oil consumption and the industry's operations.

This decrease was somewhat less than the 2 percent decline in total demand for petroleum, in reflection of the fact that wells of the United States were called upon to furnish oils that normally would have come in from South America.

While the country as a whole showed a decrease in crude output, there were twice as many states recording increases as there were showing declines. Texas and New Mexico were hard hit by the loss of markets through tanker sinkings, but declines in Illinois, Kentucky, and Oklahoma were natural. California, Kansas, Michigan, Mississippi, and the Rocky Mountain and Appalachian states all produced more crude in 1942 than in 1941.

Texas accounted for 35 percent of the nation's production in 1942. California furnished 18 percent, Oklahoma 10 percent, Louisiana 8.4 percent, Illinois 7.7 percent, Kansas 7.1 percent.

Major Refinery Changes . . .

War made strong imprints on refinery operations in 1942, and will have even greater influence in coming months. Confronted with reduced gasoline consumption and greater usage of fuel oils, refiners had to make major adjustment in product yields. Consequently, the rising trend of gasoline production was reversed, production of gasoline dropping from its 1941 level of 671 million to about 600 million in 1942. On the other hand, about 355 million barrels of residual fuel oil were produced, 18 million more than in 1941, and distillate fuel production rose 11 million barrels to 200 million barrels for the year.

The adjustment of refinery yields to obtain less gasoline and more fuel oil was one of the major economic features of the year. The adjusted yields were obtained although crude runs to stills were 150 million less than in 1941, amounting to 1,240,000,000 barrels.

Further adjustments in refinery yields must be made in 1943. With national rationing, gasoline consumption will be less but fuel oil needs will continue increasing. Likewise, more aviation gasoline must be produced, and in addition the ingredients to make synthetic rubber.

Transportation Troubles . . .

With tankers normally handling something like 1,400,000 barrels daily between the Gulf Coast and the Eastern Seaboard, both the resources and ingenuity of industry and government were heavily burdened in attempting to provide adequate substitute means when nearly all oil boats were suddenly drafted into military service following Pearl Harbor. The whole pattern of oil's shipping sys-

tem had to be changed in order to perform the functions. It is surprising that the disruption of normal petroleum movements between the Gulf and Atlantic Seaboard did not have heavier repercusions on oil consumption, production and refining operations.

Turning to rail shipments as the easiest method of getting quick results, tank cars from all over the country were pressed into Eastern service. Deliveries of petroleum by this method rose from 98,875 barrels daily in January to a peak of 830,490 barrels per day by September, and with shorter hauls to be provided through completion of new pipe lines deliveries by rail should reach 950,000 barrels per day by mid-1943. Despite numerous difficulties in procuring equipment, deliveries to the East by pipe line grew from 64,193 barrels in January to 158,633 barrels in December, and should reach 600,000 barrels per day before the end of 1943. Barge movements also rose, from 50,000 barrels to 100,000 barrels per day, and are due to increase further.

Marked increases in delivery of petroleum to the East Coast during 1943 will result from facilities now completed and scheduled to be finished.

Fewer Wells Completed . . .

A drastic drop in well drilling took place following Pearl Harbor, as the government issued well-spacing and equipment-priority regulations. A total of 21,412 wells (including all classes, such as wells deepened, disposal and injection wells besides new wells). This compared with 32,210 in 1941, or a 33.5 percent loss.

A survey of drilling prospects for 1943 indicates that there will be another 10.8-percent reduction in number of completions. It is estimated that exclusive of wells deepened, which amounted to 588 during 1942, that 18,574 wells are likely to be drilled during 1943. It is estimated that wildcats will increase slightly, accounting for 3289 of the 1943 probable total while only 3166 wildcats were completed in 1942.

Not Enough Wildcats . . .

Although wildcat drilling did not suffer as large a decline as drilling in general and therefore constituted a larger - than - normal proportion of the completions, fewer exploratory tests were completed than the number hoped for under the drilling program laid out by the government at the beginning of the year, which stressed wildcatting operations.

Only 3166 wildcat tests were completed during 1942, about three fourths of the 4000 called for by the government program.

Wildcat Results Poor . . .

Even though the proportion of drilling represented by wildcats was above normal and the percentage of exploratory tests that proved successful was in keeping with past years, the volume of wildcatting was insufficient to provide as many new oil and gas fields as desired by the government program or to equal the discovery rate of 1941.

The government program established a goal of 624 new oil producing areas, but instead only 466 oil discoveries were made, including both new fields and new pay horizons found in previously established fields. While in place of the 116 gas fields sought, there were but 57 gas fields discovered.

A total of 523 new sources of supplies were found in 1942 compared with 608 in 1941. New fields of 1942 totaled 348, against 341 in 1941, a slight increase in this classification. But new pay horizons discovered dropped to 175 in contrast with 267 in 1941.

While the total of 523 new producing supply sources was considerably less than the 608 discovered in 1941, it nevertheless ranks 1942 as the second largest field-discovery year in history from a numerical standpoint.

Less New Oil Found . . .

However, the United States experienced a most disappointing exploration year, 1942 marking the fifth consecutive 12-month period in which a diminishing quantity of new oil was found and proved. Oil found during the year is estimated to total 1,121,950,000 barrels, 847 million barrels less than during 1941, although the number of wildcats drilled and the number of new pay horizons proven productive declined but slightly.

In view of probable immediate increases in consuming rates, the steady drop in oil discovery rates creates considerable anxiety as to the nation's outlook for adequate future petroleum resources. This is especially true when the poor showing of 1942 is judged by any of the various methods used in rating discovery efficiencies, these indices showing that oil found per wildcat, per dry hole and per new producing source dropped sharply.

The trend becomes more significant when the past three years are compared with the previous three-year period, which show that prospecting efforts are being maintained and that a usual percentage of new discoveries are being made, but that fewer and fewer barrels of oil are being found. Therefore, the decline in the quantity of new oil being found is due to the failure to find as prolific producing fields as in preceding years. This situation creates fear that the larger oil accumulations of the nation may have been found, and that henceforth new fields may be smaller and smaller, which would make it necessary to drill more and more wells if enough oil is to be discovered to offset producing rates.

Crude Reserves Sag . . .

The volume of new oil found was the smallest in many years, dipping so low that it failed to equal the amount produced for the first time in nearly a decade. Although the year's production of petroleum declined nearly 20 million barrels from its 1941 level, it still exceeded the new supply of oil found and developed by 263,397,000 barrels. Consequently, the nation's known unproduced reserves sagged by this amount, and are estimated to have totaled 19,325,-899,000 barrels at the close of the year compared with 19,589,296,000 barrels a year ago.

As usual, most of the new oil found was in the Southwestern States, and particularly in Texas. Louisiana, Arkansas, Texas and Kentucky were the only states to find more oil than they produced. The decline in reserves was particularly sharp in Illinois, estimated known reserves of the state dropping from 323 million to 260 million barrels during the year.

Pipe Line Construction . . .

Pipe-line construction, paced by a gigantic government-industry war emergency program to provide inland delivery facilities to the East Coast, rose to its highest level in many years. A total of 7550 miles of pipe lines were constructed during the year, and an additional 1715 miles were still under construction as the year closed. The East Coast program involved 4918 miles of that constructed and 1517 miles of that still being built.

With the sizeable volume of work still under way starting 1943 off at a nice pace, and a 20-inch 836-mile product line to be built from Houston to Seymour, Indiana, indications are that this year will continue fairly active although unlikely to apporach the record of 1942.

Producing Oil Wells . . .

The number of producing oil wells in the United States reached a new all-time peak of 407,257 at the end of 1942, however, this represented an exceptionally small growth. The net gain of 3675 producing oil wells during 1942 compared with 10,066 in 1941, and was only 42 percent of the average annual increase of 8773 for the decade 1931-1941.

War Causes Sharp Fluctuations in Oil Activities

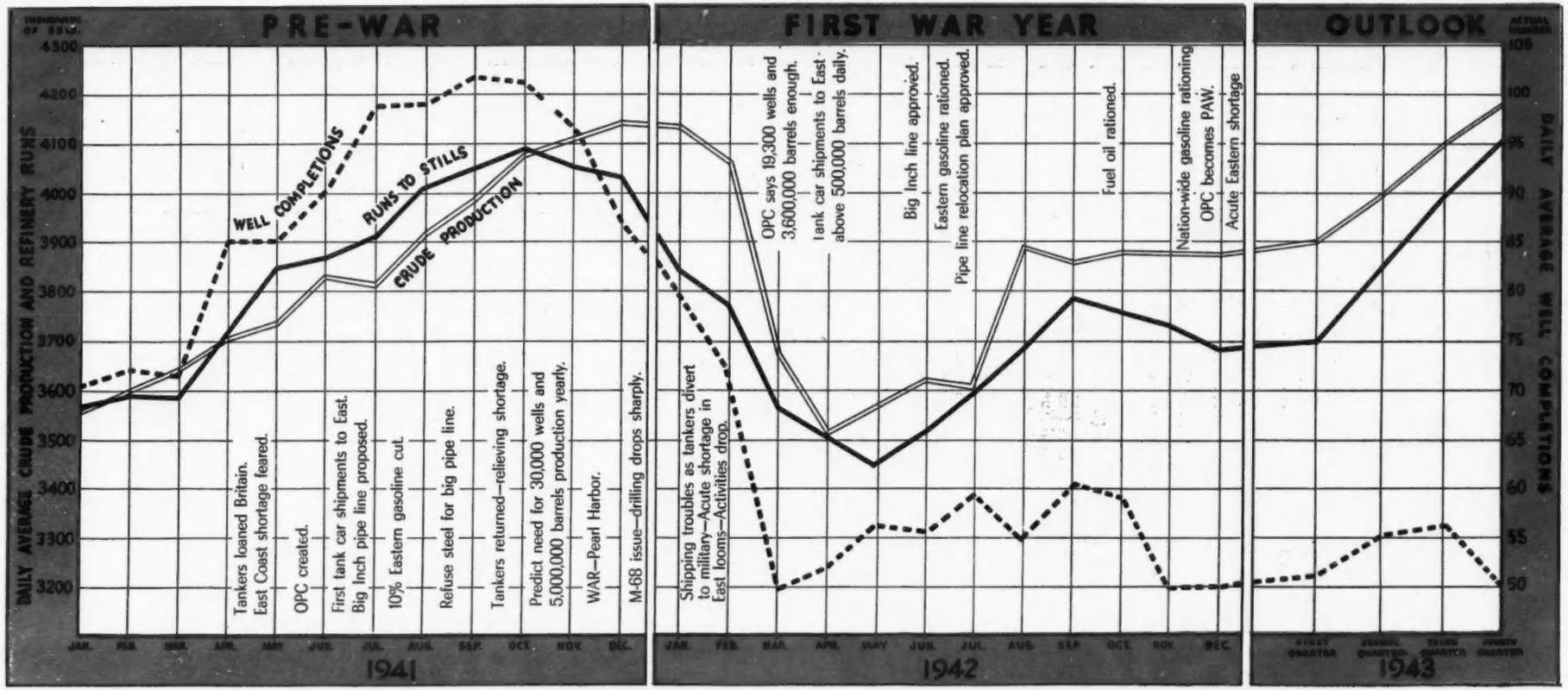
WAR brought sharp reversal and many important changes to the industry's economic trend. After a year of steadily increased activities, United States crude production and runs to stills reached all-time peaks near the end of 1941, at which time drilling operations were at near record levels. Drastic shrinkage experienced following Pearl Harbor brought these operations to low levels by March and April. Since that time, crude production and runs to stills made up much of their lost ground as military usage grew. Drilling recovered only slightly, however. These trends presage enlarged production and refining operations in 1943, and a continued small volume of drilling.

Prospects of record-level consuming rates resulting from increased military consumption as the nation enters an offensive phase of the war, are additional indications that there will be rising crude producing and refinery operating rates during 1943.

Record fuel oil needs, a feature of 1942, will continue as industrial and naval activity increases. There also will be need for more aviation gasoline as the size of the United Nation's air force grows. An enlarged army engaged in more intensive land fighting will require larger quantities of motor fuel, lubricants, etc. In addition the industry during 1943 will be called upon to supply ingredients for making synthetic rubber on a vast scale, although the volume of crude oil required for this purpose will not be large.

Furthermore, additional transportation facilities to the East Coast are now in service, and these will be augmented materially during the year, especially by completion of the big-inch pipe line scheduled to be finished next summer. The enlarged delivery facilities will call for both the production and refining of more crude oil.

The economic committee of the Petroleum Industry War Council predicts demand by the end of 1943 will be 450,000 barrels per day greater than currently. Because stocks of petroleum, both crude and refined, have been reduced to low levels. consumption must be filled from current production and refining rates.



Industry Annual Balance Sheet

	1942	1941	Difference	
			Amount	Percent
Demand: (Barrels)				
Crude Oil	1,397,000,000	1,420,000,000	—23,000,000	— 1.6
Motor Fuel	616,230,000	684,700,000	—68,470,000	— 10.0
Residual Fuel	427,140,000	406,800,000	+20,340,000	+ 5.0
Distillate Fuel	213,967,000	196,300,000	+17,667,000	+ 9.0
Crude Production: (Barrels)				
Outside of United States	609,103,000	822,654,000	—213,551,000	— 26.0
United States	1,385,347,000	1,404,182,000	—18,835,000	— 1.3
Total World Production	1,994,450,000	2,226,836,000	—232,386,000	— 10.4
Prices:				
Average U.S. Crude Price per Barrel	$1.12	$1.17	—0.05	— 4.3
Value U. S. Crude Production	$1,620,856,000	$1,572,684,000	+$48,172,000	+ 3.1
Refinery Operations: (Barrels)				
Crude Runs to Stills	1,330,678,000	1,409,192,000	—78,514,000	— 5.6
Output of Gasoline (Estimated)	590,000,000	671,000,000	—81,000,000	— 12.1
Output of Residual Fuel (Estimated)	360,000,000	342,000,000	+18,000,000	+ 5.3
Output of Distillate Fuel (Estimated)	200,000,000	189,000,000	+11,000,000	+ 5.8
Stocks: (Barrels)				
Refinable Crude Stocks End of Year	233,350,000	246,884,000	13,534,000	5.5
Heavy Crudes in California	10,600,000	10,179,000	421,000	4.1
Refined Stocks End of Year	244,500,000	290,375,000	45,875,000	15.8
Natural Gasoline	4,996,000	4,275,000	721,000	16.9
Stocks of all Oils End of Year	493,446,000	551,713,000	58,267,000	10.6
Motor Fuel	72,444,000	90,688,000	—18,244,000	— 20.1
Residual Fuel	61,173,000	83,195,000	—22,022,000	— 26.5
Distillate Fuel	43,883,000	49,926,000	— 6,043,000	— 12.1
Crude Reserves: (Barrels)				
End of Year	19,325,899,000	19,589,296,000	—263,397,000	— 1.3
Oil Found During Year	1,121,950,000	1,968,963,000	—847,013,000	— 43.0
Oil Found per Wildcat Completed	354,374	603,236	—248,862	— 41.3
Oil Found per New Field and Pay Found	2,145,219	3,212,011	—1,066,792	— 33.2
Oil Found per Dry Hole Completed	194,344	275,495	—81,151	— 29.5
Discovery Rates: (Number)				
New Fields Found	348	346	+2	+ 0.5
New Pay Horizons Proven	175	267	—92	— 34.5
Total New Sources of Supply	523	613	—90	— 14.7
Completions: (Number)				
Oil Wells	11,309	20,067	—8,758	— 43.6
Gas Wells	1,968	2,653	—685	— 25.8
Distillate Wells	105	.....	+105	.....
Dry Holes	5,773	7,141	—1,368	— 19.2
Gas Input Wells	70	117	—47	— 40.8
Water Input Wells	2,141	2,185	—44	— 2.0
Salt Water Disposal Wells	46	47	—1	— 2.1
Total all Completions	21,412	32,210	—10,798	— 33.5
Drilling: (Feet)				
Footage Drilled During Year	65,056,261	95,452,534	—30,396,273	— 31.8
Average Depth of Completions (feet)	3,038	2,963	+75	+ 2.5
Rigs in Operation End of Year (number)	2,797	4,585	—1,788	— 39.0
Producing Oil Wells: (Number)				
Flowing Wells End of Year	47,270	47,749	—479	— 1.0
Pumping Wells End of Year	359,987	355,833	+4,154	+ 1.2
Total Wells Producing End of Year	407,257	403,582	+3,675	+ 0.9
Pipe Lines: (Miles)				
Oil Lines Completed	4,200	2,900	+1,300	+ 44.8
Product Lines Completed	2,100	2,700	—600	— 22.2
Gas Lines Completed	1,250	1,700	—450	— 26.5
Total Amount of Lines Completed	7,550	7,300	+250	+ 3.4
Natural Gas: (MCF)				
Sales	1,772,994,000	1,605,973,000	+167,021,000	+ 10.4
Revenue	$584,533,000	$525,659,000	+$58,874,000	+ 11.2

EDITORIAL COMMENT

Some Factors Affecting Drilling

By RAY L. DUDLEY, Publisher

Elsewhere in this issue of THE OIL WEEKLY will be found a forecast of wells to be drilled in the United States in 1943. Under present conditions a drop is indicated. Some of the conditions forcing less wildcat and other drilling than might be considered wise in the light of dwindling reserves, are brought about by war conditions and the industry must do its very best to perform under them.

Other factors which could easily influence drilling even more adversely than is forecast, are not products of the war but are products of poor thinking on the part of some of our national representatives.

There does not seem much that can be done about the steel situation. Unless we have all been misled, which is not probable, there are points to which steel should go which are more important than drilling oil wells. Of course if the industry continues to get less and less steel, there will come a time when we shall be faced with the payoff in the form of national hysteria on reserves—and a well founded one. But for the present the production branch of the oil industry is prepared to carry on to the very best of its ability on what steel supplies it has and may get during 1943.

The man-power situation, another product of our war effort shows signs of becoming serious during the coming year. It already is getting much consideration at the hands of oil-company executives.

Still another factor which affects drilling is the question of a proper market for the oil. It ties in with the pipe, pump and transportation problem. Operators who have leaseholdings in areas not adjacent to pipe lines hesitate to drill those leases because completion of a producing well would entail consequent difficulties in carrying out lease provisions, and if there is no chance to move the oil it would hardly follow that they would be enthusiastic about carrying on such drilling. The same thing applies to areas adjacent to pipe lines where the outlets are inadequate or there is no refinery demand for the oil.

The price factor is one receiving a great deal of attention. That a price increase would favorably influence wildcat drilling seems apparent. How much of the increased income coming from a price raise could be put to wildcat drilling is a question very difficult to answer. Sound thinking on the part of government bureau employees should tell them this. In the first place a price increase is necessary to continued operations in some areas and a continuation of present prices may mean reserve loss through premature abandonment of properties. This is a feature which the powers that be in the government should not fail to understand. Too, there have been increases in costs of producing oil and in drilling for it, and today the price of petroleum and its products, as compared with the price of other essential products, is so low that any price increase likely to come will still fail to get it parity.

And finally there is another factor which is strictly a man-made one and which can result in drastically reducing the exploratory effort. That factor is the continued and continuous fight waged annually to eliminate the 27½ percent depletion clause and the intangible-cost clause from oil-company income-tax consideration. If this clause should be eliminated the effect of such a short-sighted action would be to cripple the oil industry beyond repair and its first effect would be felt on wildcat drilling.

In fact, the effect of the *threat* of elimination of the clause already is affecting drilling, a subscriber writes THE OIL WEEKLY. This subscriber, a drilling contractor, writes us:

"We find by canvassing the industry that many drilling rigs are stacked and many crews are idle, and many known structures are going undrilled because money is lacking for the necessary gamble. Those who have the money decline to risk it until they know whether or not they can count on using the 27½ percent depletion rule and intangible-cost allowance this year, or whether it will be knocked out by the U. S. Treasury. Why not seek an early declaration by the Treasury to the effect that these rules will not be disturbed this year as an inducement to search for oil?"

The point is well taken.

Surely the oil industry has enough on its shoulders with the task of producing from 5 to 7 percent more oil in 1943 with less steel than it used last year, without having to contend with purely man-made difficulties which may be the product of either lack of information or outright prejudice.

Record Demand for Oil Is Indicated for 1943

Numerous factors point toward expanded usage offsetting 1942 slump sufficiently to send consumption to new peak

By L. J. LOGAN, Associate Editor

FOLLOWING the interference of the war with consumption in the United States in 1942, it is now indicated that the total demand for all oils may expand enough in 1943 to exceed the record proportions of 1941.

The total demand dropped in 1942 about 2 percent below the record set in 1941, but for 1943 forecasters foresee the possibility that it may increase 5 to 7 percent over 1942, in which case a new record would be established.

Numerous extraordinary factors enter into calculation of probable demand, and the uncertainties of war make forecasting extremely hazardous; but a 5 percent increase is on the low side of the range of estimates for 1942 by several qualified forecasters.

Responsible for the anticipated expansion in petroleum use, it is indicated, will be several important factors, including the following:

(1). A further increase in exports, for fighting the war, following a rise in 1942.

(2). Another gain in demand for residual fuel oil, on the heels of the 5 percent increase of 1942, due to increased shipping and heavy requirements of industry and the railroads.

(3). A probable substantial increase again in use of distillate fuel oil, following a 9 percent increase and the setting of a new all-time record in 1942, this prospect being indicated by the likelihood that potential demand in the East will be better satisfied next fall and winter than it has been in the current heating season, inasmuch as transportation is being gradually improved.

(4). A further sharp increase in domestic and export demand for aviation gasoline, on top of the rapidly-grown demand of 1942.

(5). Increased importance of numerous war products, such as toluene, special lubricants and greases, and other special oils, as part of the demand for petroleum: these products representing a substantial quantity of oil, in the aggregate.

(6). The scheduled large scale production of synthetic rubber, which will be composed principally of petroleum. Well above 5,000,000 barrels of petroleum will be needed per year for rubber making when the program reaches planned proportions.

(7). The further improvement of inland transportation facilities, which will permit increased deliveries of oils to the East Coast, whether for domestic or export use.

The above factors and others not mentioned are expected to more than compensate for the retarding influences on petroleum demand, the most important of which is the war-time necessity of artificially curtailing consumption of motor fuel.

It is conceded that the total demand for all oils will be materially lower in the first quarter of 1943 than in the like period of 1942, when requirements were tapering off from the unprecedented levels of late 1941. But after the first quarter, data for 1943 will be comparing with periods in which the ill effects of war were felt, and for the year as a whole, an increase rather than a decrease in the total demand is foreseen.

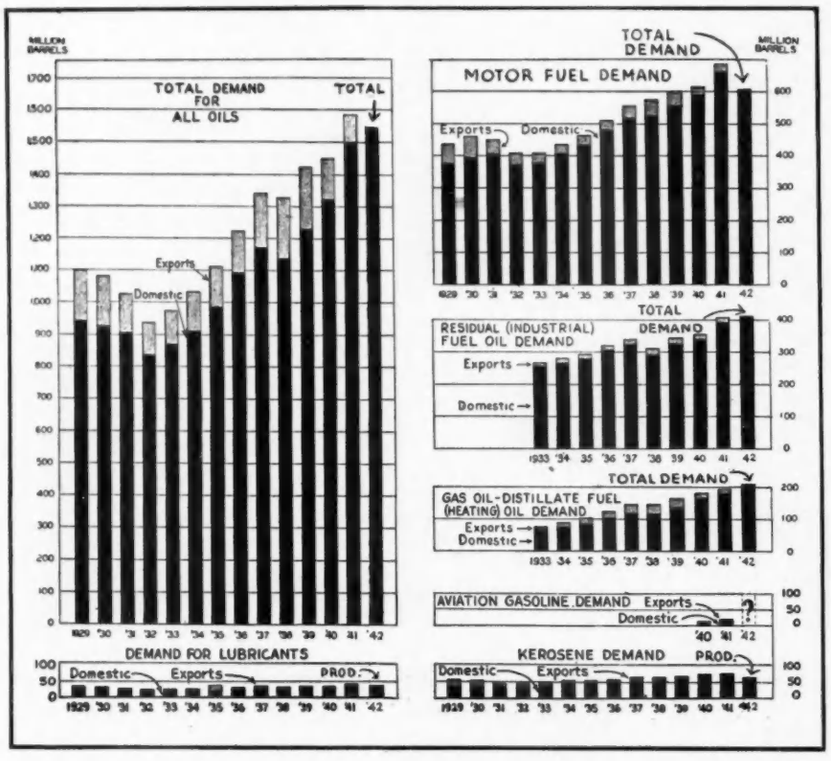
Total demand for all oils in 1942 approximated 1,558,000,000 barrels, or about 2 percent less than the record of approximately 1,589,000,000 barrels established in 1941.

Total demand for motor fuel was down about 10 percent in 1942 from the peak reached in 1941, estimates being 616,230,000 barrels for 1942, against 684,700,000 in 1941.

Largely compensating for the decrease in demand for motor fuel were increases in demand for both heavy and light fuel oils. Total demand for residual fuel oil was up 5 percent in 1942 over 1941, or to an estimated 427,140,000 barrels from 406,800,000. The total demand for gas oil and distillate fuel oil, estimated at 196,300,000 barrels in 1941, rose 9 percent in 1942 to approximately 213,967,000 barrels.

Curtailment of Gasoline Use Lowers Total Demand for Oils

Breakdown of demand by domestic and export use for 1942 not available due to wartime censorship on statistics; data on total demand based on statements issued by government sources.



Heavy Drafts Reduce Stocks to Low Levels

Withdrawals during 1942 averaged 150,000 barrels daily, leaving inventories of most oils unsatisfactorily low

THE petroleum industry of the United States drew heavily on stocks of stored oils, crude and refined, during 1942, in meeting continued large demand.

The withdrawals from storage were necessary to compensate for the sharp curtailment of imports of crude and fuel oil from South America and to alleviate the shortage of oils on the Atlantic seaboard, which could not be supplied in normal volume direct from wells and refineries of the Southwest when tanker transportation was disrupted.

The large inroads made into storage left stocks of practically all oils unsatisfactorily low and in some instances seriously short. Furthermore, the ability to replenish tanks continues impaired by two major problems: (1) that of transporting crude and refined oils from fields and refineries to the districts where storage has been depleted, and (2) the diminishing crude producing ability of some states and districts. Further expansion of inland transportation in substitution for tankers has continued, but not to an extent making possible rebuilding of stocks; and whereas Illinois, Oklahoma, and Mississippi fields helped to alleviate the Eastern shortage in 1942, those states are declining in producing ability, and the necessity of going farther west and south for Eastern supplies will place an added burden on transportation and complicate the problem of adding to or maintaining stocks of oils.

The industry took out of storage during 1942 approximately 58,267,000 barrels of all oils, an average of over 150,000 barrels per day.

In totaling only 233,350,000 barrels at the end of 1942, U. S. crude stocks were within about 4,000,000 barrels of the 20-year low reached in 1939 when Mid-Continent fields were shut down two weeks.

Oils in Storage in United States

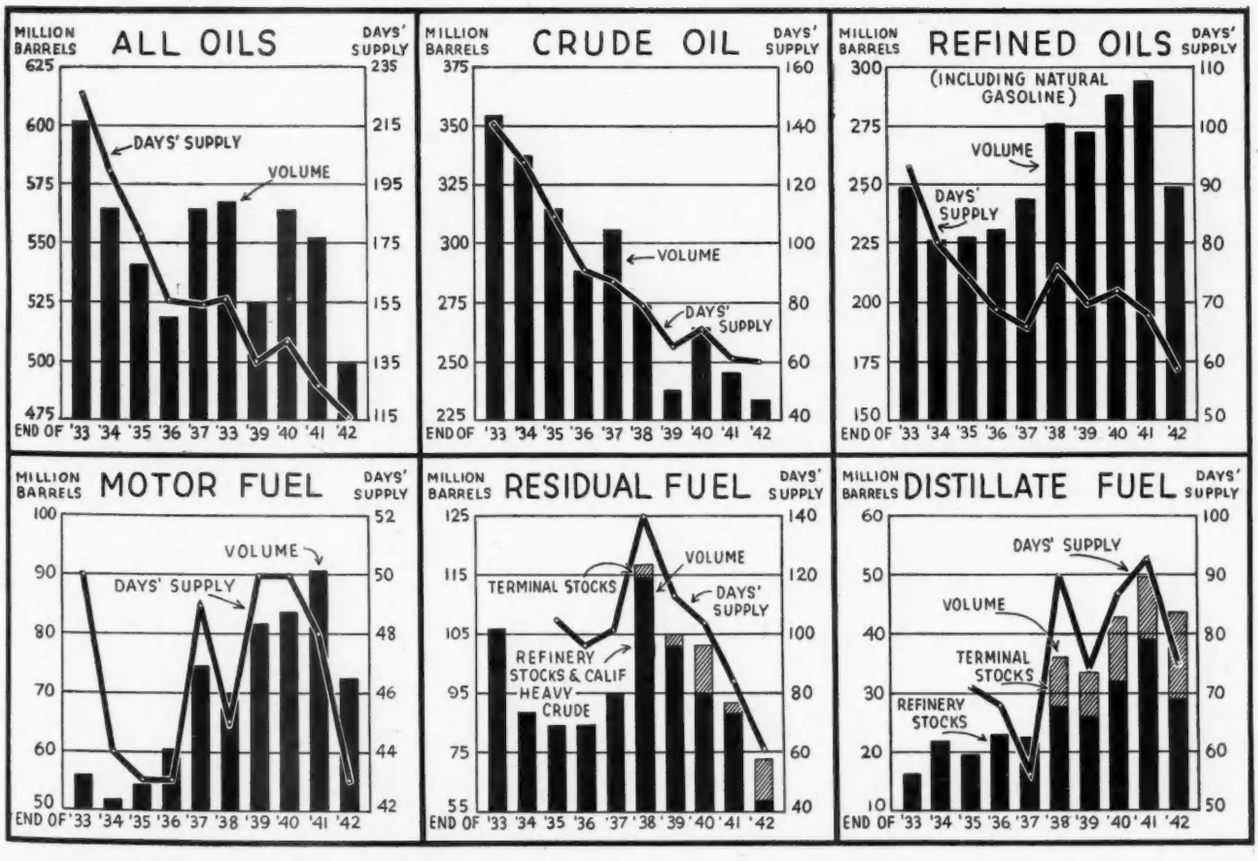
ITEM	(Thousands of Barrels) End 1941	End 1942	Change
Refinable Crude	246,884	233,350	—13,534
Heavy California Crude	10,179	10,600	+ 421
Natural Gasoline	4,275	4,996	+ 721
Refined Products	290,375	244,500	—45,875
All Oils	551,713	493,446	—58,267

Major Refined Products in Storage

ITEM	(Thousands of Barrels) End 1941	End 1942	Change
Motor Fuel	90,688	72,444	—18,244
Residual Fuel	83,195	61,173	—22,022
Distillate Fuel	49,926	43,883	— 6,043

United States Year-End Oil Stock Trends for Past Decade

Days' supply obtained by dividing stocks end of year by daily average total demand (domestic and export) during the same year.



War Trims World Crude Production Ten Percent

Shipping difficulties hurt most countries, and constitute more important retarding factor than destruction of some oil fields

AFTER having established an all-time record of 2,226,836,000 barrels in 1941, world production of crude oil dropped about 10 percent in 1942, under the severe effects of the war; and despite an expected recovery of over 5 percent in United States output in 1943, this year's total for the world probably will be at least 5 percent short of the 1941 peak.

The sharp decrease in world production in 1942, to possibly about 1,994,450,000 barrels, reflected declines in each of the three top ranking countries, the United States, Russia, and Venezuela, as well as decreases in numerous other countries, besides mirroring the large-scale destruction of wells and refineries in the East Indies and Burma.

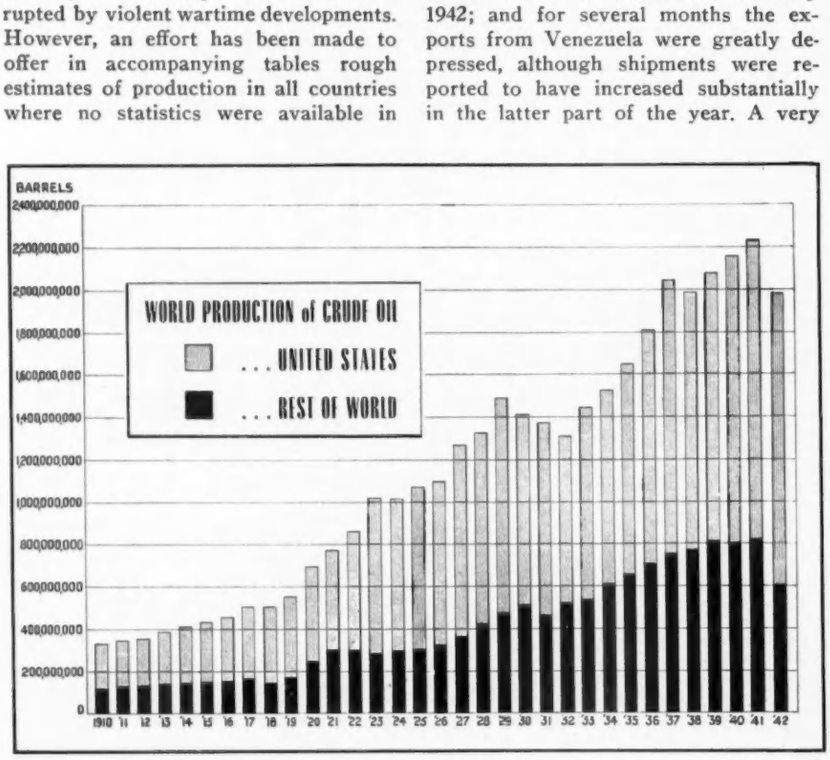
Any estimate of the world's total crude production for 1942 may be erroneous by a wide margin, as war has blacked out statistics on many important producing countries, including high-ranking Russia, Venezuela, Roumania, Netherlands Indies, British India, Iran, Iraq, Trinidad. Especially conjectural are any estimates on Russia, Venezuela, and the East Indies and Burma, where output has been disrupted by violent wartime developments. However, an effort has been made to offer in accompanying tables rough estimates of production in all countries where no statistics were available in addition to the estimates for the numerous countries, including the United States and Canada, where actual figures or safe estimates were available.

Most difficult of all estimates to make are those on Russia and Venezuela, for only Russia's leaders have authentic information on that country's oil production of 1942, under the far-reaching war developments, while Venezuela production is a matter of large military significance, being held secret therefore in the interest of the United Nations.

It is evident, however, that both of those countries must have experienced sharp declines in production of crude. Venezuela exports a large proportion of total production, and Axis submarines have greatly interfered with shipments. The raids on tankers out of Venezuela and the West Indies began concurrently with those on shipping along the East Coast of the United States in early 1942; and for several months the exports from Venezuela were greatly depressed, although shipments were reported to have increased substantially in the latter part of the year. A very substantial part of the late 1941 exports from Venezuela evidently went to the United States, and when the United States became involved in the war, those shipments virtually ceased, along with those from the Gulf Coast to the Atlantic seaboard. However, reports have circulated to the effect that the United Nations subsequently have been drawing rather heavily on Venezuelan oils for use throughout the world.

Russia not only lost the Maikop district fields to the Germans in the late summer of 1942, after destroying wells and refineries, but also had normal oil movement from the fields and refineries of the Grozny and Baku districts disrupted by the German invasion. Shipments up the Volga, normally large, were interrupted, and shipments through the Black Sea to the Ukraine were stopped by invasion of the latter region. Movement by pipe lines across the Caucasus, from Baku to Batum on the Black Sea consequently must have been greatly curtailed, except for fueling the Russian Black Sea fleet. Similarly, the pipe lines from Caspian Sea terminals and the Grozny fields to Rostov fell largely into the hands of the Germans in the late summer and early autumn and deprived the Russians of the use of that transportation unit. Several important railroad lines also fell to the Germans and reduced possibilities of transportation by rail. All these developments considered, it appears evident that Russian crude production dropped very sharply in 1942.

Aside from Venezuela and Russia, the most important countries affecting world crude output of 1942 were the East Indies and Burma. The Japanese captured some wells in British Borneo in early 1942, but some of the properties were destroyed before being given up to the Japanese, and production there very likely was down sharply for the year. In the Netherlands Indies and Burma, long-planned and effectively executed destruction of wells and refineries by the Dutch, British, and Americans was carried out before the Japanese invaded.



World Crude Oil Production, by Countries, by Years

(Complete production history of world, in thousands of barrels of 42 U. S. Gallons. *Sources: Mineral Resources and Minerals Yearbook, except as otherwise indicated)*

	NORTH AMERICA						SOUTH AMERICA							
YEAR...	Canada	Mexico	Trinidad	United States	Other North America	Total North America	Argentina	Bolivia	Colombia	Ecuador	Peru	Venezuela	Other South America	Total South America
1857														
1858														
1859				2		2								
1860				500		500								
1861				2,114		2,114								
1862	12			3,057		3,069								
1863	83			2,611		2,694								
1864	90			2,116		2,206								
1865	110			2,498		2,608								
1866	175			3,598		3,773								
1867	190			3,347		3,537								
1868	200			3,646		3,846								
1869	220			4,215		4,435								
1870	250			5,261		5,511								
1871	270			5,205		5,475								
1872	308			6,293		6,601								
1873	365			9,894		10,259								
1874	169			10,927		11,096								
1875	220			8,788		9,008								
1876	312			9,133		9,445								
1877	312			13,350		13,662								
1878	312			15,397		15,709								
1879	575			19,914		20,489								
1880	350			26,286		26,636								
1881	275			27,661		27,936								
1882	275			30,350		30,625								
1883	250			23,450		23,700								
1884	250			24,218		24,468								
1885	250			21,859		22,109								
1886	584			28,065		28,649								
1887	526			28,283		28,809								
1888	695			27,612		28,307								
1889	705			35,164		35,869								
1890	795			45,824		46,619								
1891	755			54,293		55,048								
1892	780			50,515		51,295								
1893	798			48,431		49,229								
1894	829			49,344		50,173								
1895	726			52,892		53,618								
1896	727			60,960		61,687					47			47
1897	710			60,476		61,186					71			71
1898	758			55,364		56,122					71			71
1899	808			57,071		57,879					89			89
1900	913			63,621		64,534					274			274
1901	757	10		69,389		70,156					275			275
1902	531	40		88,767		89,338					287			287
1903	487	75		100,461		101,023					278			278
1904	553	126		117,081		117,760					290			290
1905	634	251		134,717		135,602					373			373
1906	569	502		126,494		127,565					531			531
1907	789	1,005		166,095		167,889	[D]				751			751
1908	528	3,933	[D]	178,527		182,988	12				945			957
1909	421	2,714	57	183,171		186,363	18				1,411			1,429
1910	316	3,634	143	209,557		213,650	20				1,258			1,278
1911	291	12,553	285	220,449		233,578	13				1,465			1,478
1912	243	16,558	437	222,935		240,173	47				1,752			1,799
1913	228	25,696	504	248,446		274,874	131				2,071			2,202
1914	215	26,235	644	265,763		292,857	276				1,837			2,113
1915	215	32,911	750	281,104		314,980	513				2,579			3,092
1916	198	40,546	929	300,767		342,440	867				2,593			3,460
1917	214	55,293	1,602	335,316		392,425	1,218			57	2,577	120		3,972
1918	305	63,828	2,082	355,928		422,143	1,353			[E]60	2,527	333		4,273
1919	241	87,073	1,841	378,367		467,522	1,331			[E]60	2,628	425		4,444
1920	196	157,069	2,083	442,929		602,277	1,651			[E]60	2,817	457		4,985
1921	188	193,398	2,354	472,183		668,123	2,036		67	[E]60	3,699	1,433		7,295
1922	179	182,278	2,445	557,531		742,433	2,866		323	[E]60	5,314	2,201		10,764
1923	170	149,585	3,051	732,407		885,213	3,400		425	87	5,699	4,201		13,812
1924	161	139,678	4,057	713,940		857,836	4,639		445	[E]100	8,379	9,042		22,605
1925	332	115,515	4,387	763,743		883,977	6,336		1,007	160	9,232	19,687		36,422
1926	364	90,421	4,971	770,874		866,630	7,851		6,444	214	10,762	36,911		62,182
1927	477	64,121	5,380	901,129		971,107	8,630		15,014	537	10,127	63,134		97,442
1928	624	80,151	7,684	901,474		959,933	9,070		19,897	1,084	12,006	105,749		147,806
1929	1,117	44,688	8,716	1,007,323		1,061,844	9,391	[D]	20,385	1,381	13,422	137,472		182,051
1930	1,522	39,530	9,419	898,011		948,482	9,002	56	20,346	1,553	12,449	136,669		180,075
1931	1,543	33,039	9,744	851,081		895,407	11,709	25	18,237	1,762	10,089	116,613		158,435
1932	1,044	32,805	10,126	785,159		829,134	13,139	44	16,414	1,597	9,899	116,541		157,634
1933	1,145	34,001	9,561	905,656	23	950,386	13,691	112	13,158	1,620	13,257	117,720		159,558
1934	1,417	38,172	10,894	908,065	28	958,576	14,024	159	17,341	1,637	16,314	136,103		185,578
1935	1,447	40,241	11,671	996,596	47	1,050,002	14,297	164	17,598	1,732	17,067	148,254		199,112
1936	1,500	41,028	13,237	1,099,687	62	1,155,514	15,458	105	18,756	1,942	17,593	154,794		208,648
1937	2,944	46,907	15,503	1,279,160	33	1,344,547	16,355	122	20,599	2,161	17,457	186,230		242,924
1938	6,966	38,506	17,737	1,214,355	78	1,277,642	17,076	226	21,582	2,246	15,839	188,174		245,143
1939	7,838	42,898	19,270	1,264,962	112	1,335,080	18,613	215	23,857	2,313	13,508	206,470		264,976
1940[H]	8,591	44,036	20,219	1,353,214	142	1,426,202	20,609	288	25,593	2,349	12,126	185,570		246,535
1941[H]	10,125	43,054	21,211	1,404,182	150	1,478,722	21,763	230	24,553	1,557	11,922	223,784		283,809
1942[K]	9,818	35,100	*21,000	1,385,347	150	1,451,415	23,000	250	11,100	2,000	11,700	*135,000		183,050
Total[K]	84,375	2,069,204	*243,994	26,595,947	825	28,994,345	270,405	1,996	313,141	28,389	287,657	*2,433,087		3,334,675

*Production for 1942 highly conjectural; no statistics available for whole year.

[A] Included in India, British, prior to 1935. [B] Includes fields in Russian Asia other than Sakhalin. [C] Exclusive of U.S.S.R. fields in Asia, other than Sakhalin, which are included with U.S.S.R. in Europe. [D] Less than 1,000 barrels. [E] Approximate production. [F] No more data available. [G] Year ended September 30. [H] All figures for 1940 and 1941 are from U. S. Bureau of Mines publication, "International Petroleum Trade," for March 31, 1942. [I] Beginning of production in Brunei. [J] Production of France in previous years credited to Germany. [K] Figures for 1942 estimated by The Oil Weekly; highly conjectural except for United States, Canada, and some countries not greatly affected by the war.

World Crude Oil Production, by Countries, by Years

(Complete production history of world, in thousands of barrels of 42 U. S. Gallons. *Sources: Mineral Resources and Minerals Yearbook*, except as otherwise indicated)

	EUROPE												AFRICA			
YEAR	Albania	Czechoslovakia	England	France	Germany	Austria	Hungary	Italy	Poland	Roumania	[B]U.S.S.R. (Russia)	Other Europe	[B]Total Europe	Egypt	Algeria	Other Africa	Total Africa
1857										2			2				
1858										4			4				
1859										4			4				
1860								D		9			9				
1861								D		17			17				
1862								D		23			23				
1863								D		28	41		69				
1864								D		33	65		98				
1865								2		39	67		108				
1866								1		42	83		126				
1867								1		51	120		172				
1868								D		56	88		144				
1869								D		59	202		261				
1870								D		84	204		288				
1871								D		90	165		255				
1872								D		91	185		276				
1873								D		104	475		579				
1874								1	150	103	583		837				
1875								1	158	108	697		964				
1876								3	164	111	1,321		1,599				
1977								3	170	108	1,801		2,082				
1878								4	176	109	2,401		2,690				
1879								3	215	110	2,761		3,089				
1880					9			2	229	115	3,001		3,356				
1881					29			1	287	122	3,601		4,040				
1882					58			2	330	136	4,538		5,064				
1883					27			2	365	139	6,002		6,535				
1884					46			3	408	211	10,805		11,473				
1885					41			2	465	193	13,925		14,626				
1886					74			2	306	168	18,006		18,556				
1887					74			1	344	182	18,368		18,969				
1888					85			1	467	219	23,049		23,821				
1889					68			1	515	298	24,609		25,491				
1890					108			3	659	383	28,691		29,844				
1891					109			8	631	488	34,573		35,809				
1892					101			18	646	593	35,775		37,133				
1893					100			19	693	535	40,457		41,804				
1894					123			21	949	508	36,375		37,976				
1895					121			26	1,453	576	46,140		48,316				
1896					145			18	2,444	543	47,221		50,371				
1897					166			14	2,226	571	54,399		57,376				
1898					184			15	2,376	776	61,610		64,961				
1899					192			16	2,314	1,426	65,955		69,903				
1900					358			12	2,347	1,629	75,780		80,126				
1901					314			16	3,251	1,678	85,168		90,427				
1902					354			19	4,142	2,060	80,540		87,115				
1903					446			18	5,235	2,763	75,591		84,053				
1904					637			26	5,947	3,599	78,537		88,746				
1905					561			44	5,766	4,421	54,960		65,752				
1906					579			54	5,468	6,378	58,897		71,376				
1907					757			60	8,456	8,118	61,851		79,242				
1908					1,009			51	12,612	8,252	62,187		84,111				
1909					1,019			42	14,933	9,327	65,970		91,291				
1910					1,032			51	12,673	9,724	70,337		93,817				
1911					1,017			75	10,519	11,108	66,184		88,903	21			21
1912					1,031			54	8,535	12,976	68,019		90,615	214			214
1913					857			47	7,818	13,555	62,834		85,111	98			98
1914					781			40	6,436	12,827	67,020		87,104	753	1		754
1915					703			44	5,352	12,030	68,548		86,677	212	4		216
1916					656			51	6,587	8,945	65,817		82,056	404	8		412
1917				[J]	642			41	6,228	3,721	63,072		73,704	943	9		952
1918				363	270			35	6,032	8,730	27,168		42,598	1,935	7		1,942
1919		48	2	334	265			35	6,096	6,618	31,752		45,150	1,517	5		1,522
1920		69	3	356	246			35	5,607	7,435	25,430		39,181	1,042	4		1,046
1921		94	3	389	274			32	5,167	8,368	28,968		43,295	1,255	*3		1,258
1922		120	1	496	319			31	5,227	9,843	35,692		51,729	1,188	9		1,197
1923		74	1	494	346			34	5,402	10,867	39,147		56,365	1,054	9		1,063
1924		76	2	497	406			39	5,657	13,369	45,355		65,401	1,122	11		1,133
1925		158	3	459	541			61	5,960	16,650	52,448		76,280	1,226	12		1,238
1926		150	2	478	653			41	5,844	23,314	64,311		94,793	1,188	9		1,197
1927		112	2	504	663			47	5,342	26,368	77,018		110,056	1,267	8		1,275
1928		94	1	512	630			46	5,492	30,773	[G]84,745		122,293	1,842	8		1,850
1929		93		535	704			45	4,988	34,758	[G]99,507		140,630	1,868	20		1,888
1930		157	D	523	1,182			59	4,904	41,624	[G]125,555		174,904	1,996	16		2,012
1931		134	F	520	1,606			124	4,662	49,127	162,842		219,015	2,038	F		2,038
1932		126	F	530	1,608			208	4,116	53,815	154,367		214,770	1,895	F		1,895
1933	11	122	F	562	1,665			204	4,072	54,020	154,840		215,496	1,663	F		1,663
1934	10	178	F	557	2,187			151	3,913	62,063	174,318		243,377	1,546	F		1,546
1935	41	133	F	541	2,996	44		119	3,812	61,310	182,386	2	251,384	1,301	F	4	1,305
1936	273	127	F	503	3,115	50		123	3,789	63,659	186,206	1	257,846	1,278	F	4	1,282
1937	619	123	F	502	3,176	221	16	110	3,716	52,452	193,241	4	254,180	1,196	F	22	1,218
1938	752	130	F	513	3,861	383	288	101	3,763	48,487	204,956	9	263,243	1,581	F	27	1,608
1939	934	120	F	500	4,487	693	1,103	91	3,898	45,483	216,866	10	274,185	4,666	F	27	4,693
1940[H]	1,497	119	F	496	4,544	719	1,755	57	3,891	42,182	218,600	10	273,870	6,053	F	27	6,080
1941[H]	1,381	109	F	479	4,438	692	2,474	46	3,319	38,147	238,150	10	289,245	7,659	F	27	7,686
1942[K]	1,350	110	F	475	*4,500	700	*5,000	45	3,300	*38,000	*182,000	10	235,490	7,500	F	25	7,525
Total[K]	6,868	2,776	20	12,118	*59,295	3,502	*10,636	2,858	269,414	*990,140	*4,825,539	56	6,183,222	59,521	143	163	59,827

*Production for 1942 highly conjectural; no statistics available for whole year.

[A] Included in India, British, prior to 1935. [B] Includes fields in Russian Asia other than Sakhalin. [C] Exclusive of U.S.S.R. fields in Asia other than Sakhalin, which are included with U.S.S.R. in Europe. [D] Less than 1,000 barrels. [E] Approximate production. [F] No more data available. [G] Year ended September 30. [H] All figures for 1940 and 1941 are from U. S. Bureau of Mines publication, "International Petroleum Trade," for March 31, 1942. [I] Beginning of production in Brunei. [J] Production of France in previous years credited to Germany. [K] Figures for 1942 estimated by The Oil Weekly; highly conjectural except for United States, Canada, and some countries not greatly affected by the war.

World Crude Oil Production, by Countries, by Years

(Complete production history of world, in thousands of barrels of 42 U. S. Gallons. *Sources: Mineral Resources and Minerals Yearbook*, except as otherwise indicated)

	ASIA															
YEAR	Bahrein Island	[A]Burma	India, British	Iran (Persia)	Iraq	Japan (Incl Taiwan)	Netherland India	Sakhalin	Br. Borneo (Sarawak & Brunei)	Saudi Arabia	Other Asia	[C]Total Asia	Australia and New Zealand	World Undistributed	World Total	Percent Pro. by U.S.
1857	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
1858	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
1859	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	31
1860	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	509	98
1861	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,131	99
1862	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,092	99
1863	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,763	94
1864	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,304	92
1865	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,716	92
1866	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,899	92
1867	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,709	90
1868	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,990	91
1869	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,696	90
1870	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,799	91
1871	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,730	91
1872	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,877	92
1873	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,838	91
1874	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,933	92
1875	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	5	.....	.....	9,977	88
1876	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	7	.....	.....	11,851	83
1877	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	10	.....	.....	15,754	85
1878	.....	.....	.....	.....	.....	18	.....	.....	.....	.....	.....	18	.....	.....	18,417	84
1879	.....	.....	.....	.....	.....	23	.....	.....	.....	.....	.....	23	.....	.....	23,601	84
1880	.....	.....	.....	.....	.....	26	.....	.....	.....	.....	.....	26	.....	.....	30,018	88
1881	.....	.....	.....	.....	.....	17	.....	.....	.....	.....	.....	17	.....	.....	31,993	86
1882	.....	.....	.....	.....	.....	15	.....	.....	.....	.....	.....	15	.....	.....	35,704	85
1883	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	20	.....	.....	30,255	78
1884	.....	.....	.....	.....	.....	28	.....	.....	.....	.....	.....	28	.....	.....	35,969	67
1885	.....	.....	.....	.....	.....	30	.....	.....	.....	.....	.....	30	.....	.....	36,765	59
1886	.....	.....	.....	.....	.....	38	.....	.....	.....	.....	.....	38	.....	.....	47,243	59
1887	.....	.....	.....	.....	.....	29	.....	.....	.....	.....	.....	29	.....	.....	47,807	59
1888	.....	.....	.....	.....	.....	37	.....	.....	.....	.....	.....	37	.....	.....	52,165	53
1889	.....	.....	94	.....	.....	53	.....	.....	.....	.....	.....	147	.....	.....	61,507	57
1890	.....	.....	118	.....	.....	52	.....	.....	.....	.....	.....	170	.....	.....	76,633	60
1891	.....	.....	190	.....	.....	53	.....	.....	.....	.....	.....	243	.....	.....	91,100	60
1892	.....	.....	242	.....	.....	69	.....	.....	.....	.....	.....	311	.....	.....	88,739	57
1893	.....	.....	299	.....	.....	106	600	.....	.....	.....	.....	1,005	.....	.....	92,038	53
1894	.....	.....	327	.....	.....	173	688	.....	.....	.....	.....	1,188	.....	.....	89,337	55
1895	.....	.....	372	.....	.....	170	1,216	.....	.....	.....	.....	1,758	.....	.....	103,692	51
1896	.....	.....	430	.....	.....	237	1,427	.....	.....	.....	.....	2,094	.....	.....	114,199	53
1897	.....	.....	546	.....	.....	262	2,552	.....	.....	.....	.....	3,360	.....	.....	121,993	50
1898	.....	.....	542	.....	.....	319	2,964	.....	.....	.....	.....	3,825	.....	.....	124,979	44
1899	.....	.....	941	.....	.....	539	1,796	.....	.....	.....	.....	3,276	.....	.....	131,147	44
1900	.....	.....	1,079	.....	.....	871	2,253	.....	.....	.....	.....	4,203	.....	.....	149,137	43
1901	.....	.....	1,431	.....	.....	1,117	4,014	.....	.....	.....	.....	6,562	.....	20	167,448	41
1902	.....	.....	1,617	.....	.....	996	2,430	.....	.....	.....	.....	5,043	.....	26	181,809	49
1903	.....	.....	2,510	.....	.....	1,209	5,770	.....	.....	.....	.....	9,489	.....	36	194,879	52
1904	.....	.....	3,385	.....	.....	1,219	6,508	.....	.....	.....	.....	11,112	.....	40	217,948	54
1905	.....	.....	4,137	.....	.....	1,347	7,850	.....	.....	.....	.....	13,334	.....	30	215,091	63
1906	.....	.....	4,016	.....	.....	1,564	8,181	.....	.....	.....	.....	13,761	.....	30	213,263	59
1907	.....	.....	4,344	.....	.....	1,718	9,983	.....	.....	.....	.....	16,045	.....	30	263,957	63
1908	.....	.....	5,047	.....	.....	1,871	10,283	.....	.....	.....	.....	17,201	.....	30	285,287	63
1909	.....	.....	6,677	.....	.....	1,887	11,042	.....	.....	.....	.....	19,606	.....	20	298,709	61
1910	.....	.....	6,138	.....	.....	1,829	11,031	.....	.....	.....	.....	18,998	.....	20	327,763	64
1911	.....	.....	6,451	.....	.....	1,737	12,173	.....	.....	.....	.....	20,361	.....	20	344,361	64
1912	.....	.....	7,117	.....	.....	1,659	10,846	.....	.....	.....	.....	19,622	.....	20	352,443	63
1913	.....	.....	7,930	1,857	.....	1,940	11,172	.....	141	.....	.....	23,040	.....	20	385,345	64
1914	.....	.....	7,410	2,910	.....	2,636	11,422	.....	318	.....	.....	24,696	.....	20	407,544	65
1915	.....	.....	8,202	3,616	.....	2,928	11,920	.....	392	.....	.....	27,058	.....	10	432,033	65
1916	.....	.....	8,491	4,477	.....	2,963	12,547	.....	629	.....	.....	29,107	.....	25	457,500	66
1917	.....	.....	8,079	7,147	.....	2,861	13,180	.....	542	.....	.....	31,809	.....	29	502,891	67
1918	.....	.....	8,188	8,623	.....	2,441	12,778	.....	504	.....	.....	32,534	.....	25	503,515	71
1919	.....	.....	8,736	10,139	.....	2,238	15,508	.....	596	.....	.....	37,217	.....	20	555,875	68
1920	.....	.....	8,375	12,230	.....	2,221	17,529	.....	1,020	.....	.....	41,375	.....	20	688,884	64
1921	.....	.....	8,734	16,673	.....	2,233	16,958	2	1,411	.....	.....	46,011	.....	20	766,002	62
1922	.....	.....	8,529	22,247	.....	2,055	17,066	7	2,849	.....	.....	52,753	.....	22	858,898	65
1923	.....	.....	8,406	25,230	.....	1,804	19,870	9	3,940	.....	.....	59,259	.....	24	1,015,736	72
1924	.....	.....	8,416	32,373	.....	1,814	20,473	80	4,163	.....	.....	67,319	.....	24	1,014,318	70
1925	.....	.....	8,274	35,038	.....	1,915	21,422	87	4,257	.....	.....	70,993	.....	23	1,068,933	71
1926	.....	.....	8,011	35,842	.....	1,785	21,243	181	4,942	.....	.....	72,004	.....	17	1,096,823	70
1927	.....	.....	8,032	39,688	338	1,789	27,459	440	4,943	.....	.....	82,689	.....	13	1,262,582	71
1928	.....	.....	8,741	43,461	713	1,944	32,118	677	[D]5,223	.....	.....	92,877	.....	15	1,324,774	68
1929	.....	.....	8,747	42,145	798	2,023	39,279	[G]1,134	5,290	.....	.....	99,416	.....	38	1,485,867	68
1930	.....	.....	8,292	45,828	913	1,950	41,729	[G]1,805	4,907	.....	.....	105,424	.....	40	1,410,037	64
1931	.....	.....	8,200	44,376	830	2,050	35,539	2,734	3,854	.....	.....	97,583	.....	54	1,372,532	62
1932	.....	.....	8,817	49,471	836	1,630	39,001	2,631	3,796	.....	.....	106,182	.....	62	1,309,677	60
1933	31	.....	8,743	54,392	917	1,455	42,606	2,338	4,490	.....	.....	114,972	.....	71	1,442,146	63
1934	285	.....	10,503	57,851	7,689	1,834	46,925	2,881	5,140	.....	.....	133,108	.....	96	1,522,281	60
1935	1,265	7,181	2,038	57,273	27,408	2,249	47,171	2,545	5,546	.....	.....	152,676	5	4	1,654,488	60
1936	4,645	7,588	1,978	62,718	30,406	2,440	50,025	3,212	5,209	20	.....	168,241	5	4	1,791,540	61
1937	7,762	7,848	2,162	77,804	31,836	2,488	56,724	3,656	6,009	65	.....	196,354	4	4	2,039,231	63
1938	8,298	7,538	2,488	78,372	32,643	2,511	57,318	[E]3,821	6,913	495	.....	200,397	4	4	1,988,041	61
1939	7,589	7,873	2,327	78,151	30,791	2,654	62,087	[E]4,000	7,097	3,934	.....	206,503	3	4	2,085,444	61
1940[H]	7,074	7,731	2,250	66,900	24,225	2,639	62,011	[E]4,000	7,047	5,365	.....	189,242	3	14	2,141,946	63
1941[H]	6,794	7,762	2,270	64,000	12,650	2,659	53,704	[E]4,000	6,864	5,871	.....	166,574	3	14	2,226,836	63
1942[K]	*7,000	*1,750	2,250	*65,000	*12,000	*2,700	*13,750	[E]4,000	*2,500	*6,000	.....	116,950	5	15	1,994,450	69
Total[K]	*50,743	*55,271	261,669	*1,145,832	*214,993	*88,209	*1,044,141	*44,240	*110,532	*21,750	.....	3,037,380	32	1,073	41,610,554	64

*Production for 1942 highly conjectural; no statistics available for whole year.

[A] Included in India, British, prior to 1935. [B] Includes fields in Russian Asia other than Sakhalin. [C] Exclusive of U.S.S.R. fields in Asia, other than Sakhalin, which are included with U.S.S.R. in Europe. [D] Less than 1,000 barrels. [E] Approximate production. [F] No more data available. [G] Year ended September 30. [H] All figures for 1940 and 1941 are from U. S. Bureau of Mines publication, "International Petroleum Trade," for March 31, 1942. [I] Beginning of production in Brunei. [J] Production of France in previous years credited to Germany. [K] Figures for 1942 estimated by The Oil Weekly; highly conjectural except for United States, Canada, and some countries not greatly affected by the war.

Crude Reserves Drop As Less Oil Is Found Than Produced

Nation experiences disappointing exploration year . . . Rate of finding new oil supplies continues to decline in 1942 despite maintenance of prospecting efforts at high level . . . Discovery trends make the outlook for adequate future supply uncertain

By WARREN L. BAKER, Editor

THE declining rate of discovering new petroleum supplies that characterized United States' finding efforts the previous four years continued during 1942. Continuation of this diminishing trend resulted in the most disappointing exploration period in many years. The volume of new oil found was the smallest in many years, dipping so low that it failed to equal the amount produced for the first time in nearly a decade.

Although the year's production of petroleum declined nearly 20 million barrels from its 1941 level, it still exceeded the new supply of oil found through discovery of new fields, new pay horizons, field extensions and pool development drilling by 263,397,000 barrels. Therefore, the nation's known unproduced reserves sagged by this amount, and on this basis are estimated to have totaled 19,325,899,000 barrels at the close of the year compared with 19,589,296,000 barrels a year ago. The volume of new oil found and proven was 1,121,950,000 barrels compared with the production of 1,385,347,000 barrels.

Outlook Becomes Uncertain

While production did not exceed the new supply of oil found sufficiently to reduce known reserves severely, nevertheless considerable anxiety over the nation's outlook for adequate future petroleum resources arises from the steady downward dip in quantities of new oil being discovered annually. The past 12 months represent the fifth consecutive year of diminishing discoveries. In the face of probable immediate future increases in consumption, the steady drop in discovery rates cannot be shrugged aside. This is especially true when the poor showing of 1942 is judged by any of the various methods used in rating discovery efficiencies, namely that of barrels found per wildcat, per dry hole, and per new producing source of supply. Every one of these indices show that prospecting efforts are being maintained at high levels, but that fewer and fewer barrels of oil are being found. Therefore, the decline is due to failure to find as prolific pools as in preceding years. This situation naturally creates fear that the larger oil accumulations of the nation may have been found, and that henceforth fields will be smaller and smaller. This would mean that the industry will find it necessary to drill more and more wells if enough oil is to be discovered to offset producing rates. Consequently, an increase in the cost of finding oil appears likely.

Less New Oil Being Found

Oil found during 1942 was 847 million barrels less than that discovered during 1941, although the number of wildcats drilled and the number of new fields and pay horizons proven declined but slightly.

The trend becomes more significant

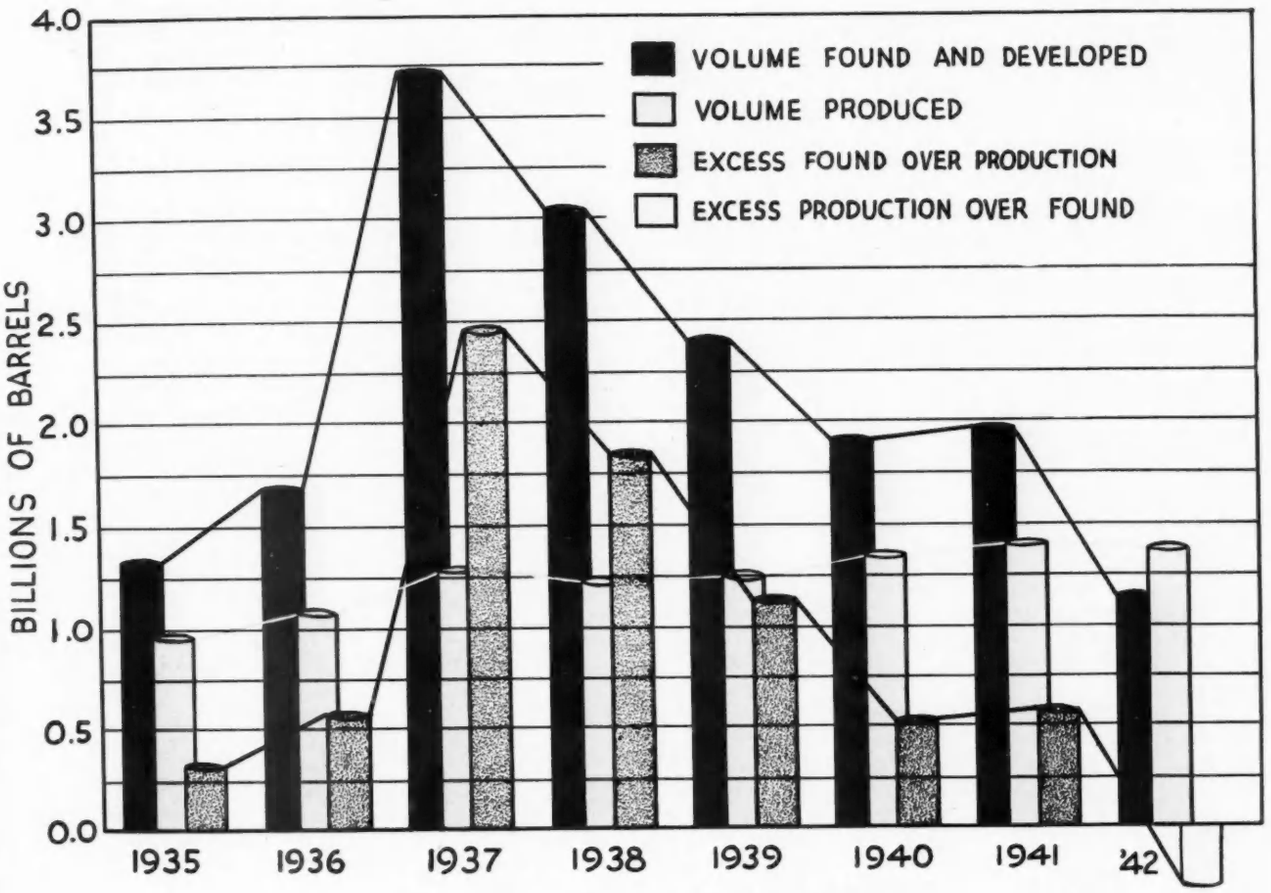
United States Crude Oil Reserves and Discovery Trends

	New Oil Found (Barrels)	Oil Produced (Barrels)	Excess Oil Found (Barrels)	Accumulated Reserves (End of Period)	Dry Holes Completed (No.)	Wildcats Completed (No.)	New Fields & Pays Found (No.)	AVERAGE BARRELS OF OIL FOUND AND DEVELOPED			
								Per Year	Per Dry Hole	Per Wildcat	Per New Field & Pay Discoveries
1859-1899...	2,000,000,000	938,983,000	1,061,017,000	1,061,017,000	26,128	.....	.....	50,000,000	76,546	.....	.....
1900-1904...	1,750,000,000	439,319,000	1,310,681,000	2,371,698,000	17,863	.....	.....	350,000,000	97,967	.....	.....
1905-1909...	1,500,000,000	789,005,000	710,995,000	3,082,693,000	17,567	.....	.....	300,000,000	85,387	.....	.....
1910-1914...	2,000,000,000	1,167,150,000	832,850,000	3,915,543,000	16,064	.....	.....	400,000,000	124,501	.....	.....
1915-1919...	2,000,000,000	1,651,481,000	348,519,000	4,264,062,000	23,470	.....	.....	400,000,000	85,215	.....	.....
1920-1924...	4,000,000,000	2,919,990,000	1,080,010,000	5,344,072,000	28,222	.....	.....	800,000,000	141,733	.....	.....
1925-1929...	6,750,000,000	4,344,543,000	2,405,457,000	7,749,529,000	34,757	.....	.....	1,350,000,000	194,205	.....	.....
1930-1934...	8,775,500,000*	4,347,970,000	4,427,530,000	12,177,059,000	20,279	.....	.....	1,755,100,000	432,738	.....	.....
1935.....	1,319,537,000	996,596,000	322,941,000	12,500,000,000	5,558	.....	†	1,319,537,000	236,137	.....	†
1936.....	1,663,090,000	1,099,690,000	563,400,000	13,063,400,000	5,695	.....	223	1,663,090,000	292,026	.....	7,457,802
1937.....	3,721,532,000	1,277,664,000	2,443,868,000	15,507,268,000	6,370	.....	360	3,721,532,000	584,224	.....	10,337,589
1938.....	3,054,064,000	1,213,186,000	1,840,878,000	17,348,146,000	6,133	*	424	3,054,064,000	497,940	*	7,202,981
1939.....	2,399,122,000	1,264,256,000	1,134,866,000	18,483,012,000	6,670	2,589	474	2,399,122,000	359,688	929,659	5,061,439
1935-1939...	12,157,345,000	5,851,392,000	6,305,953,000	18,483,012,000	30,456	.....	.....	2,431,469,000	399,177	.....	.....
1940.....	1,893,350,000	1,351,847,000	541,503,000	19,024,515,000	6,770	3,038	494	1,893,350,000	279,668	623,222	3,832,692
1941.....	1,968,963,000	1,404,182,000	564,781,000	19,589,296,000	7,147	3,264	613	1,968,963,000	275,495	603,236	3,212,011
1942.....	1,121,950,000	1,385,347,000	−263,397,000	19,325,899,000	5,773	3,166	523	1,121,950,000	194,344	354,374	2,145,219
Total U. S.	45,917,108,000	26,591,209,000	19,325,899,000	19,325,899,000	234,466	.....	.....	553,218,000	195,836	.....	.....

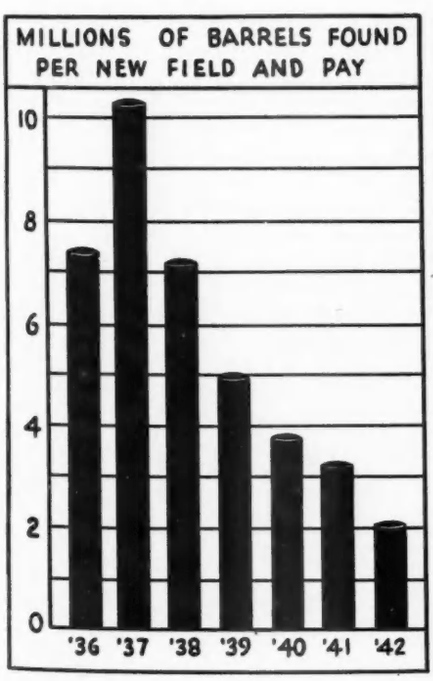
* Sufficient wildcat data to be representative not available prior to 1939. Wildcat figures for years 1939, 1940 and 1941 from Dr. Frederic H. Lahee's annual wildcat report to American Association of Petroleum Geologists. 1942 figures compiled by The Oil Weekly.

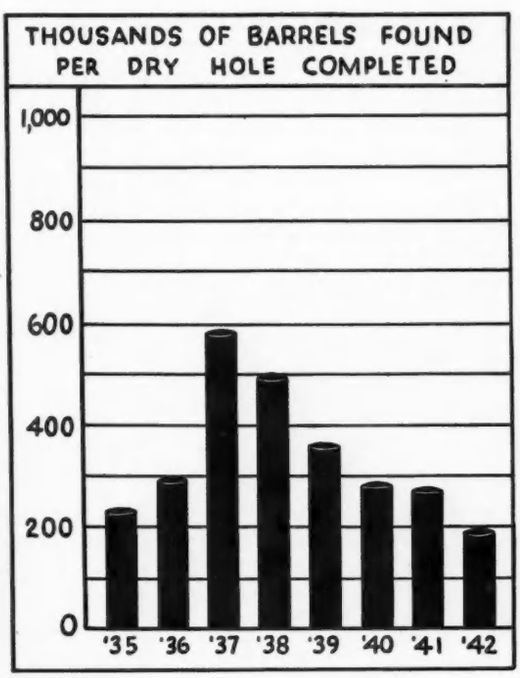
† Data on number of new fields and new pay horizons found in previously established fields not available prior to 1936. Figures from The Oil Weekly.

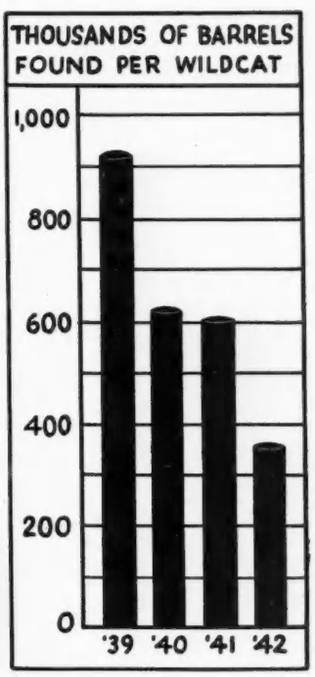
U. S. Experience in Oil Finding Rates



Above: Relationship of Oil Discovery and Producing Rates.
Below: Relationship of Oil Finding and Prospecting Efforts.







when compared over three-year periods, as the rate of decline increases more sharply, and this also has the advantage of smoothing out periodic variations that may occur in short periods. The amount of new oil discovered during the last three years was but little more than half that found during the preceding three years, although more wildcats and more dry holes were drilled, and more new fields were discovered. An average of but 1,661,423,000 barrels of new oil was found annually during the last three years, in contrast with an annual average of 3,058,239,000 barrels for the preceding three years, from 1937 to 1939 inclusive.

Efficiency Rates Dip Sharply

In view of the decline in barrels of oil found while prospecting efforts have continued at a high level, 1942 rates as an extremely poor exploratory year when viewed from any of the usual various methods of rating discovery efficiency.

Some may argue that because many of the newly found producing sources can be credited with only small proportions of their ultimate quantities of oil until further developed, it is impossible to fairly judge recent discoveries on the basis of barrels found per wildcat or per new field and pay horizon. Admittedly, this method is not an accurate statistical gauge in the true sense, but when each year is scrutinized from such viewpoints they do constitute a means of rating their relative efficiency.

Reserve, Discovery and Production Insert Drawing

ACCOMPANYING this issue is a multi-colored insert drawing dramatizing the United States 1942 Oil Discovery and Production Rate by States. It shows the volume of remaining known unproduced crude-oil reserves by states, the volume of new oil found in different states and quantities produced, as well as the number of wildcat tests completed during the past year.

These data are presented in such fashion that it is easy to see whether production exceeded the new volume found, the rate at which known crude-oil reserves are being produced, the relative amount of wildcatting in the different states, and the relationship between new oil discovered and the number of wildcats completed.

The 1,121,950,000 barrels of oil found and proved during 1942 represents an average of 2,145,219 barrels for each of the new fields and new pay horizons found during 1942. This is in contrast with an average of 3,212,011 barrels for each of the 613 fields and pay horizons discovered during 1941.

During the past three years a total of 1630 fields and pay producing horizons have been discovered, whereas the preceding three years (1937-1938-1939) recorded 1258 new sources of supply. This growth in number of oil-producing sources discovered, coupled with the decline in total volume of oil found, dropped the average quantity of petroleum found per each new supply source from 7,293,098 barrels for the 1937-1939 period to 3,057,830 barrels for the 1940-1942 period.

With wildcat exploration at a high level, atlhough slightly down in 1942 from the peak attained in 1941, the quantity of oil found per wildcat test completed has dropped sharply also. Because wildcat statistics on a sufficient scale to be representative do not go beyond the year 1939, it is impossible to compare this measure of efficiency for two full three-year periods. However, on a straight yearly basis, the volume of oil found per wildcat test completed has slumped from 929,659 barrels in 1939, to 623,222 barrels in 1940, to 603,236 barrels in 1941, and then drastically to 354,374 barrels per wildcat in 1942.

The ratio of oil found per dry hole drilled also declined severely. Last year, although the number of dry holes declined in view of the drilling slump, the oil supplies discovered and proved were equivalent to only 194,344 barrels of new oil for each of the 5773 non-successful completions. This compares with a ratio of 275,495 barrels of oil found for each dry hole in 1941. Back in 1937, the volume of new petroleum supplies proved averaged 584,224 barrels per dry hole. During the past three years the total volume of oil found has been equivalent to 249,836 barrels for each hole drilled. In contrast, the preceding three years found 480,617 barrels of new oil for each dry hole.

United States Crude Reserve Trend by States for Past Six Years

	January 1, 1938	Percent	January 1, 1939	Percent	January 1, 1940	Percent	January 1, 1941	Percent	January 1, 1942	Percent	January 1, 1943	Percent
West Coast:												
California	3,063,142,000	19.7	3,188,763,000	18.4	3,532,342,000	19.1	3,291,382,000	17.3	3,323,147,000	17.0	3,159,249,000	16.3
	3,063,142,000	19.7	3,188,763,000	18.4	3,532,342,000	19.1	3,291,382,000	17.3	3,323,147,000	17.0	3,159,249,000	16.3
Rocky Mountain:												
Wyoming	265,922,000	1.7	261,133,000	1.5	305,616,000	1.6	304,821,000	1.6	304,053.000	1.6	298,438,000	1.5
Montana	109,378,000	0.7	104,471,000	0.6	93,460,000	0.5	89,443,000	0.5	86,124,000	0.4	79,629,000	0.4
Colorado	19,125,000	0.1	17,713,000	0.1	20,162,000	0.1	23,223,000	0.1	23,443,000	0.1	21,597,000	0.1
	394,425,000	2.5	383,317,000	2.2	419,238,000	2.2	417,387,000	2.2	413,620,000	2.1	399,664,000	2.0
N. Mid-Continent												
Kansas	601,317,000	3.9	613,230,000	3.5	725,467,000	3.9	692,270,000	3.6	689,795,000	3.5	661,870,000	3.4
Nebraska	.....	....	.....	....	50,000	0.0	3,749,000	0.0	4,014,000	0.0	2,802,000	0.0
Oklahoma	1,212,252,000	7.8	1,162,370,000	6.7	1,063,152,000	5.7	1,001,909,000	5.3	1,035,820,000	5.3	976,794,000	5.1
	1,813,569,000	11.7	1,775,600,000	10.2	1,788,669,000	9.6	1,697,928,000	8.9	1,729,629,000	8.8	1,641,466,000	8.5
Southwest:												
Arkansas	192,101,000	1.2	188,246,000	1.1	320,148,000	1.7	306,218,000	1.6	295,017,000	1.5	343,715,000	1.8
Louisiana	713,434,000	4.6	1,040,356,000	6.0	1,173,225,000	6.3	1,215,459,000	6.4	1,330,134,000	6.8	1,371,367,000	7.1
Texas	8,247,928,000	53.2	9,447,764,000	54.5	9,768,371,000	53.0	10,623,516,000	55.8	10,975,641,000	56.0	11,027,776,000	57.1
Mississippi	.....	....	.....	....	6,642,000	0.0	40,242,000	0.2	80,207,000	0.4	53,946,000	0.3
New Mexico	546,587,000	3.6	703,252,000	4.1	687,168,000	3.7	692,141,000	3.6	674,817,000	3.4	672,486,000	3.5
	9,700,050,000	62.6	11,379,518,000	65.7	11,955,554,000	64.7	12,877,576,000	67.6	13,355,816,000	68.1	13,469,290,000	69.8
North Central:												
Illinois	40,884,000	0.3	242,847,000	1.4	381,636,000	2.1	315,305,000	1.7	333,714,000	1.7	260,786,000	1.3
Indiana	2,622,000	0.1	6,031,000	0.0	14,164,000	0.0	13,703,000	0.1	22,873,000	0.1	19,129,000	0.1
Kentucky	38,366,000	0.2	37,545,000	0.2	44,086,000	0.2	40,999,000	0.2	36,450,000	0.2	38,752,000	0.2
Michigan	49,181,000	0.3	42,749,000	0.3	51,078,000	0.3	34,579,000	0.2	55,620,000	0.3	41,244,000	0.2
Ohio	28,456,000	0.2	26,358,000	0.1	31,692,000	0.2	30,284,000	0.2	37,404,000	0.2	37,305,000	0.2
	159,509,000	1.1	355,530,000	2.0	522,656,000	2.8	434,870,000	2.4	486,061.000	2.5	397,215,000	2.0
Eastern:												
New York	60,535,000	0.4	40,490,000	0.3	35,392,000	0.2	65,001,000	0.3	59,816,000	0.3	55,365,000	0.3
Pennsylvania	287,886,000	1.8	200,460,000	1.1	183,123,000	1.0	187,647,000	1.0	170,897,000	0.9	155,413,000	0.8
West Virginia	28,152,000	0.2	24,468,000	0.1	45,888,000	0.2	52,444,000	0.3	50,011,000	0.3	47,848,000	0.3
	376,573,000	2.4	265,418,000	1.5	264,403,000	1.4	305,092,000	1.6	280,724,000	1.5	258,626,000	1.4
Miscellaneous*	.....	....	.....	....	150,000	0.0	362,000	0.0	299,000	0.0	388,000	0.0
Total U. S.	15,507,268,000	100.0	17,348,146,000	100.0	18,483,012,000	100.0	19,024,515,000	100.0	19,589,296,000	100.0	19,325,899,000	100.0

Figures for January 1, 1943 by The Oil Weekly, all other years by the American Petroleum Institute.

* Includes Tennessee, Utah and Missouri.

General Heading: BAKER ROTARY WALL SCRAPER and BAKER ROTARY WALL SAMPLER

Unit No. A-22

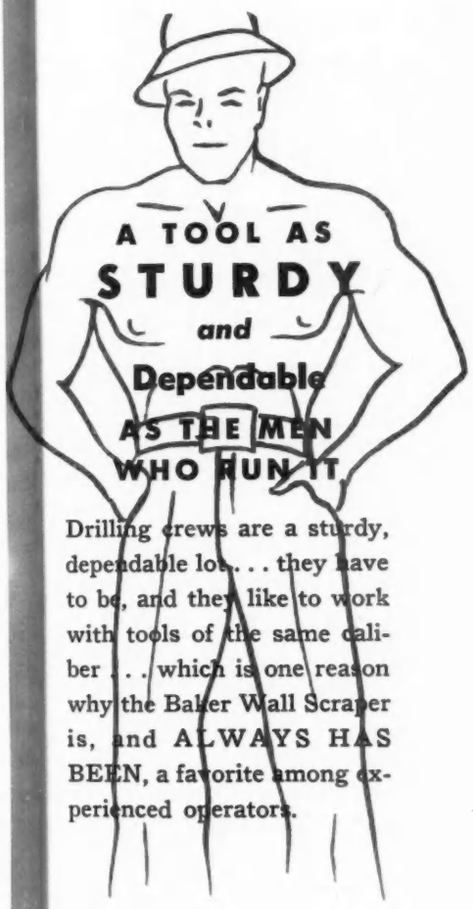
Subject:

A Simple Solution to Hole Enlarging and Wall Scraping Problems

BAKER OIL TOOLS, INC.

Main Office and Factory:
6000 So. Boyle Ave., Box 127, Vernon Station, Los Angeles, Calif.
Central Division Office and Factory:
6023 Navigation Blvd., Box 3048, Houston, Texas
Export Sales Office:
19 Rector Street, New York, N. Y.

Index: 250.1
Date: February 1, 1943
Page: 1 of 1 pg.



Drilling crews are a sturdy, dependable lot. . . they have to be, and they like to work with tools of the same caliber . . . which is one reason why the Baker Wall Scraper is, and ALWAYS HAS BEEN, a favorite among experienced operators.

The Baker Rotary Wall Scraper provides a safe, economical method of enlarging the walls of an open hole to a diameter considerably larger than that of the casing through which it is run.

SIMPLICITY OF USE AND OPERATION:

This tool is practically fool-proof. It is constructed with a minimum number of essential parts. Any experienced driller can secure FIRST TIME satisfactory results.

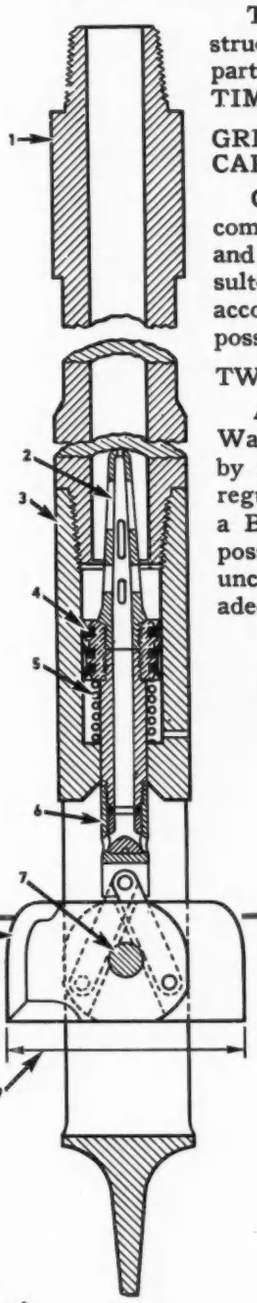
GREAT STRENGTH AND REAMING CAPACITY:

Correct design plus sturdy construction, have combined to give the tool great strength (safety), and a remarkable reaming capacity. This has resulted in the Baker Wall Scraper being able to accomplish many jobs never before considered possible.

TWO TOOLS IN ONE:

Also, don't overlook the fact that the Baker Wall Scraper is really "Two Tools In One," as by merely substituting Sampler Blades for the regular Scraper Blades the tool is converted into a Baker Wall Sampler. With this device it is possible to take cores from the side walls of any uncased hole at any depth . . . cores that are adequate for accurate laboratory analysis.

Send for Baker Broadcast No. 19 . . . a 40-page illustrated treatise giving complete details as to the many practical field applications for the Baker Wall Scraper and Wall Sampler.



Product No. 500
Baker Rotary Wall Scraper

Features Which Make the *BAKER ROTARY WALL SCRAPER* A DEPENDABLE TOOL:

(1) Double Pin Drill Collar—Connects Wall Scraper Body to drill collar.

(2) Circulation Screen—Design of cone-shaped Screen minimizes abrasive action of fluid and prevents debris from clogging circulation passages.

(3) Wall Scraper Body—Machined out of a solid piece of special alloy steel . . . provides great strength.

(4) Plunger Head—Provided with oil resistant Seals to prevent fluid by-pass and insure Piston efficiency . . . Blades will Positively Open.

(5) Plunger Spring—Strong Plunger Spring insures proper closing of blades.

(6) Bushing (Circulation Bean)—Fluid is directed on each blade, lubricating and cooling cutting surfaces.

(7) Hinge Pin—Machined from solid piece of special alloy steel.

(8) Blades—Machined from special alloy steel forgings . . . afford toughness and hardness. Cutting edges are hard-faced and set with Tungsten Carbide Inserts. Long bearing surface on blades minimizes "corkscrewing."

(9) Blade Expansion—Amazing reaming capacity provided by expansion range of Cutter Blades from 4" to 36".

For further instructions and operating details, see pages 279-287 of the 1942 Baker or Composite Catalog.

Service Note

Competent Baker men will service, make suggestions, and otherwise assist in securing best possible results.

As usual, most of the oil discovered was found in the Southwestern States, which comprise PAW's District 3 group. These states in 1942 found a total of 800,630,000 barrels of new oil, 71 percent of all that discovered and developed during the year. This was the only region in the nation to find more oil than it produced during the year, production being exceeded by 113,474,000 barrels although producing 50 percent of the nation's output. As a result, the region's proven unproduced reserves remaining at the end of the year increased to 13,469,290,000 barrels, or 69.8 percent of the nation's total. A year ago the territory had 68.1 percent of the country's reserves. Five years ago this sector had 9,700,000,000 barrels of reserves, which was equivalent to 62.8 percent of the nation's total.

The majority of the gain in the Southwest goes to the credit of Texas where prospecting continued fairly successful although not equal to that of preceding years. This state discovered a total of 534,890,000 barrels of oil, 47 percent of all that found in the nation, which exceeded its production by 52,135,000 barrels. Consequently, its reserves rose to 11,027,776,000 barrels, and now constitute 57.1 percent of all the known unproduced oil in the country.

Louisiana also contributed to the growth in the Southwestern states, finding 157,625,000 barrels of new oil. This was 41,233,000 barrels more than it produced, boosting its reserves to 1,371,367,000 barrels or 7.1 percent of the nation's total. It is one of the three states that have more than 1 billion barrels of remaining proved oil reserves, Texas and California being the others.

Arkansas did well, the discovery and development of 75,315,000 barrels of oil exceeding its production by 48,698,000 barrels. The state now has 343,715,000 barrels of remaining oil reserves, which places it well ahead of Illinois.

New Mexico and Mississippi, the other two members of the Southwestern group, both lost ground, the former by a small volume and the latter heavily.

Other Groups

The North Mid-Continent group of states, Oklahoma, Kansas and Nebraska, failed to find as much as they produced, consequently they had 1,641,466,000 barrels of reserves the end of 1942 in comparison with 1,729,629,000 barrels a year previous.

Oklahoma found only 81,360,000 barrels of oil, and its reserves dropped below the 1-billion-barrel mark, registering 976,794,000 barrels. Kansas, which was producing at its highest rate in history, found only 70 million barrels of oil, which left it with 661,870,000 barrels of reserves.

The North Central group of states experienced heavy drafts on reserves, due primarily to the situation in Illinois. Reserves of this state dropped from 333,714,000 barrels to 260,786,000 barrels during the year. A large number of new producing sources were opened, but these and others found during 1941 that were developed last year all proved exceptionally small. Kentucky was the bright spot of the territory, finding 2,302,000 barrels more than it proved. Indiana and Michigan both had disappointing years.

California, the lone West Coast producing state, produced 163,898,000 barrels more than it found. Consequently, its reserves fell to 3,159,249,000 barrels by the end of the year.

PAW Crude Reserve Estimates

THE OIL WEEKLY had hoped to be able to present in this issue the new estimate on United States crude oil reserves on which special committees of PAW have been working for many months, but information from the office of Deputy Administrator E. DeGolyer in Washington indicates that the figures will not be ready for release until late in February.

The PAW committees, appointed by DeGolyer last year, had hoped to complete their work by the middle of last summer, but additional duties placed on them in connection with estimates as to the amount of "available" oil in the United States, plus the mass of data to be studied, have substantially delayed completion of the work. These committees have been studying actual oil company records, material involving all of the factors now considered in arriving at reserves, and the final report is awaited with great interest. The amount of work involved in the study has been enormous. In one district more than 3,300 reservoirs have been studied.

While no official word has been forthcoming as to any preliminary figures, from one source or another the idea has come that in some very important reserve areas the reserve estimates commonly in use may be increased materially. This does not apply to Illinois where it is reported reserve estimates have been substantially reduced.

Grateful Acknowledgement to Many Helpers

IN preparing the many surveys and economic features that appear in this issue, the editorial staff of THE OIL WEEKLY had the assistance of many oil and gas companies, state oil and gas agencies, and numerous individuals. Their help has been of immeasurable value, and we wish to express our indebtedness and grateful appreciation.

A larger number of companies, agencies, associations, and individuals furnished various data on both past developments and outlook trends than ever before. Their help was particularly valuable in compiling data on drilling and pumping prospects, crude oil reserves, production and well-completion records, and pipe-line construction.

Too many companies and company executives and operating personnel contributed to be mentioned individually, and many for one reason or another requested that their aid remain anonymous. For example, more than 100 engineers, superintendents and other company executives from all over the United States supplied data for the survey of pumping equipment needs in 1943. A larger number assisted in the drilling forecast survey, especially companies who gave confidential data from their 1943 drilling budgets.

Among those whose help has been given freely to more than one of the economic studies are: Alex Crowell, director, Arkansas Oil & Gas Commission; C. H. Thigpen, chief engineer, Arkansas Oil & Gas Commission; A. H. Bell, head of Oil & Gas Division, Illinois Geological Survey; George V. Cohee, assistant state geologist, Indiana Department of Conservation, Division of Geology; Fred Van Covern, director, statistical department, American Petroleum Institute; E. M. Dutton, auditor, Arkansas Oil & Gas Commission; Conservation Committee of California Oil Producers; J. P. Roberts, Kansas Oil & Gas Conservation Commission; P. Hastings Keller, in charge of Oil and Gas Section, Indiana Division of Geology; H. W. Bell, Division of Minerals, Louisiana Department of Conservation; David B. Reger, consulting geologist of West Virginia; R. R. Jackson, secretary, Montana Oil Conservation Commission; F. R. Frye, supervisor of wells Michigan Department of Conservation; H. M. Morse, Mississippi Oil & Gas supervisor; John M. Kelly, director, New Mexico Oil Conservation Commission; C. G. Staley, proration office at Hobbs New Mexico; Oil Conservation Department, Oklahoma Corporation Commission; W. W. Dunlap, Pennsylvania Grade Crude Oil Association; Bradford District Pennsylvania Oil Producers Association; Ralph Zook, Sloan & Zook, Bradford, Pa.; Kendall E. Born, associate geologist Tennessee, Department of Conservation; Rietz C. Tucker, assistant state geologist West Virginia; Texas Railroad Commission; American Institute of Mining and Metallurgical Engineers; American Petroleum Institute; United States Bureau of Mines; The Petroleum and Natural Gas Conservation Board, Province of Alberta, Canada; H. A. Buehler, director, Missouri Geological Survey; National Stripper Well Association, and many others.

Women's hands take over

—to release men's hands for fighting!

IN scores of war plants, women have replaced men as turret lathe operators. Results have been surprisingly good. Of course, women with a few weeks' training can't be expected to fill the shoes of expert, experienced machinists, but for the steady, repetitive turning operations needed for much of today's war work, women operators are a logical answer to manpower shortages.

Close supervision is necessary and help in chucking and handling heavy parts must be given but because of the extreme accuracy and rugged durability built into modern Warner & Swaseys, maintaining close tolerances is not a major difficulty.

Plants now using women turret lathe operators (and there are many of them) find after a few weeks' training, women turret lathe operators are fast and dependable, with scrap losses held remarkably low.

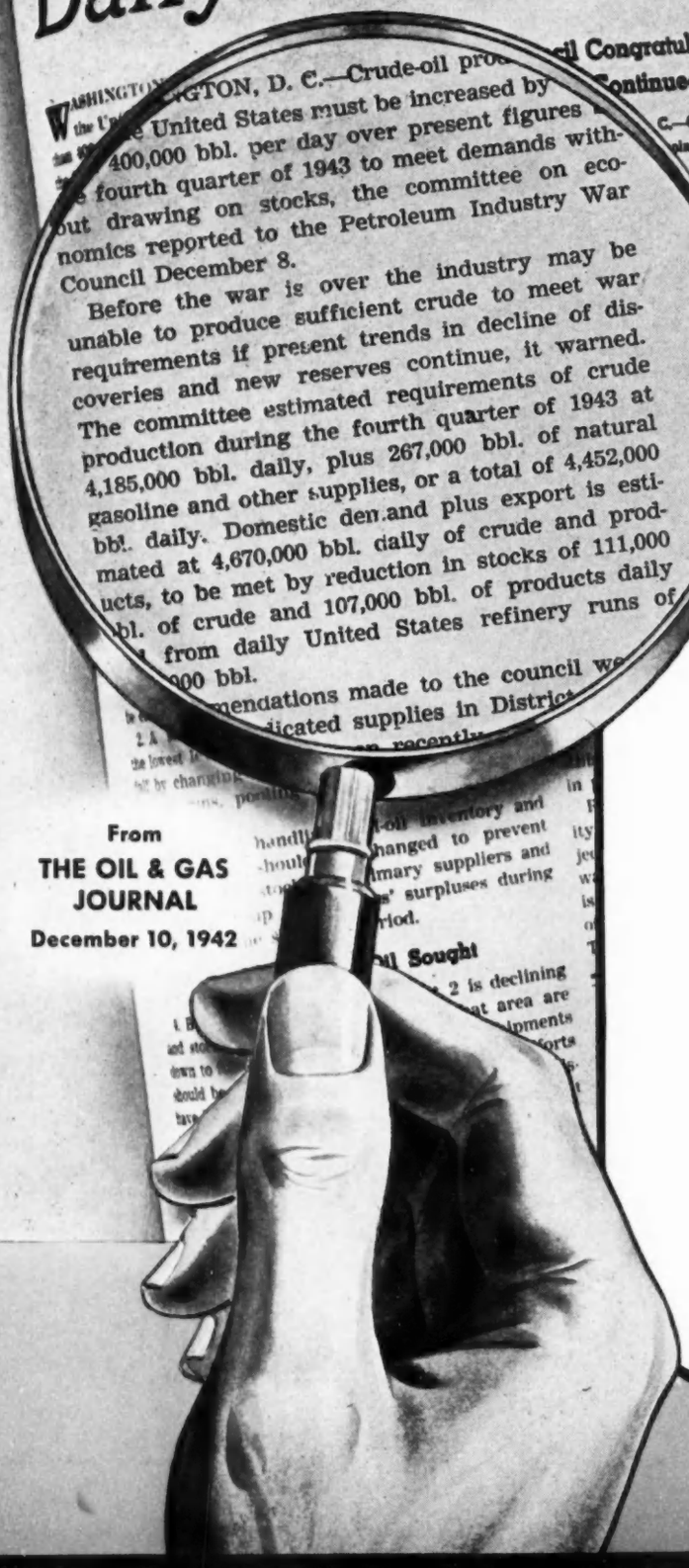
The convenient controls and speed regulators on Warner & Swaseys minimize manual effort and lessen fatigue.

Thousands of women have been working on Warner & Swaseys in England and Russia. American women can be relied upon to do an equally good job.

WARNER & SWASEY FOR VICTORY

YOU CAN TURN IT BETTER, FASTER, FOR LESS... WITH A WARNER & SWASEY

Increase of 400,000 Bbl. in Daily Demand Seen in 1943



From
THE OIL & GAS JOURNAL
December 10, 1942

★ **THE INFORMATION contained in our 1942 advertising on the proper care and maintenance of National-Ideal Machinery and Equipment has been reproduced in two convenient forms; one on cardboard for posting at point of field operations and the other in a folder for office reference files.**

In view of the contemplated demands for increased petroleum production during 1943, we urge you to write us for sufficient quantities of both types of these forms for distribution throughout your organization.

You will find this information most helpful in maintaining the efficiency and prolonging the life of your present equipment during the War period.

NSCO

Your National Ideal Equipment will Handle the job
We asked our Field Engineers:
"WHAT CAN OUR CUSTOMERS DO TO PROLONG THE LIFE OF THEIR NATIONAL SUCKER RODS?"
. . . and here are their Recommendations:
INDI
SPENSABLE to Victory . . .
SERVICE OF IDEAL CHAIN CAN BE EXTENDED
A LITTLE EXTRA SERVICE FROM
CARE WILL GIVE YOU A LOT OF EXTRA YOUR IDEAL Power Pumps
ASSURES PRODUCTION
MENT MAINTENANCE
A LOT OF EXTRA SERVICE FROM YOUR IDEAL Power Pumps
THE MAN-MADE ARTERIES OF HORSEPOWER
THE NATIONAL SUPPLY COMPANY

THE NATIONAL SUPPLY COMPANY

Executive Offices: Pittsburgh, Penna. • General Sales Office: Toledo, Ohio • Division Offices: Fort Worth, Texas; Tulsa, Okla.; Torrance, Calif. EXPORT: The National Supply Corporation, 30 Rockefeller Plaza, New York, N. Y., U. S. A.; River Plate House, 12 South Place, London, E. C. 2, *Limited Liability.*

SOON- YOU CAN USE THIS FINE MUD WEIGHTING MATERIAL LESS ROYALTY COST!

On March 9, 1943, when certain patents affecting the cost of mud weighting materials expire, oil operators will continue to use MAGCOBAR BARITE at an even greater saving than they have enjoyed in the past.

MAGCOBAR BARITE is produced by our exclusive flotation process and is laboratory-controlled throughout production. Its excellent mud weighting qualities have been effectively demonstrated in practically every area where the problem of hole conditioning and pressure control has been encountered.

Major operators have purchased over a million bags of MAGCOBAR BARITE during the past two years!

SPECIFICATIONS

Specific Gravity	4.3-4.45
Size	99%—325 Mesh
pH	Approximately Neutral

STOCKS AT: *Texas*—Alice, Alvin, Bay City, Beaumont, Houston, Katy, Pinehurst, Refugio, and San Benito. *Louisiana*—Baton Rouge, Berwick, Harvey, Houma, Jennings, Ferriday, Lockport, New Iberia, Opelousas, Sulphur, Venice, and Ville Platte.

MAGCOGEL BENTONITE

This almost pure colloidal material is carefully manufactured from the finest bentonite available. It, too, has been used by numerous operators with complete satisfaction when its gel-forming and wall building qualities were needed in the drilling fluid.

MAGNET COVE BARIUM CORPORATION

MINES & PLANT; Malvern, Arkansas — SALES OFFICE; Niels Esperson Bldg. Houston, T

Further Slight Decline In Drilling Foreseen for 1943

Number of completions likely to be off 10.8 percent and footage down 11.45 percent against 1942 totals, with wildcatting expected to exceed the 1941 pace

By RAY L. DUDLEY, Publisher
and
ELTON STERRETT, Staff Writer

SUMMARIZING and evaluating all the information and opinions available, it now appears as the year opens that the oil industry will drill 18,574 new wells during 1943. This figure includes water-input and secondary recovery drilling, but does not include the number of wells which probably will be drilled deeper in 1943. Of this total, indications point to 3289 wildcats being drilled.

This figure shows a drop of 2250 wells from 1942 drilling of the same type, while the prospective wildcatting campaign falls far below the 4500 desired by PAW. While pressure from Washington or the liberalizing of wildcat benefits may increase the number of exploratory wells to be drilled, the figure on total wells, as well as that on prospective wildcats, has for basis the plans of the industry as revealed by the various avenues of information available in amassing the data from which the summaries are derived.

In normal times, if sufficient information can be collected, the task of forecasting a year's operations is tedious, but not extremely difficult. This year, however, so many factors at present indeterminate can affect the drilling program that an attempt has been made only to indicate the trend from conditions existing at the turn of the year.

Actually, an increase in the price of crude oil and a relaxing of the restrictions on materials and equipment could and probably would mean a large increase in operations. On the other hand, still further tightening on steel and other supplies, increases in expense without improvement in crude prices, greater scarcity of skilled manpower and elimination of the 27½ percent depletion tax clause could reduce the number of wells to be drilled in 1943 appreciably below the estimated totals.

As in the past, THE OIL WEEKLY has contacted all companies drilling 15 or more wells in 1942, asking information, based on 1943 budgets, as to how many wells were scheduled to be drilled in proven areas, and how many wildcats were contemplated. A few admitted that the situation was so uncertain as to make planning impossible. Others stated that unless conditions improved no wells would be drilled. Most of the companies not only answered our questions on budgeted drilling, but also gave figures to answer the question "If material and price situation were adjusted we would like to drill during 1943 ——— proven and ——— wildcat wells." They also furnished information as to whether pumping equipment purchases would increase or decrease, while a large group of engineers and superintendents from all sections aided in determining the second-hand pumping equipment situation.

In addition to analyzing the information furnished by the oil companies we have had the benefit of field estimates from our territorial editors on whom much of the burden of the survey falls each year. These men supplemented the mail canvass of companies by contacting district and field officials and from information thus obtained and their own files estimated the number of wells which would probably be drilled in each field during the forthcoming year.

Factors Influencing Estimates

Among the factors which seem reasonably certain is that more crude oil will be needed in 1943 than was used in 1942. How much more will be needed is a question. Transportation limitations, shipments to the Allies from foreign fields, etc., will influence production. PIWC has indicated that the last quarter of 1943 may see an increase in demand of 400,000 barrels per day over the last quarter of 1942, but this increase will not apply for the entire year. It seems probable that a conservative approach would indicate an increase in domestic crude demand of 5 to 7 percent in 1943 over 1942.

Another reasonable certainty is that the Southwestern fields of Texas, New Mexico and Louisiana will be called on to deliver more oil than they did last year, this in part caused by a falling off of Illinois and the inability of Oklahoma to increase production materially. Another factor favoring heavier production from Texas is the big-inch pipe line and the plans now being made to move more crude oil from Texas fields to Coastal refineries to take the place of East Texas oil going north by pipe line. New lines from the Coast area will likely influence upward production of Louisiana oil while New Mexico will supplement Texas crude movements.

The drop in Illinois production has been large, production in January of this year being around 140,000 barrels per day less than a year ago, and this in spite of the greatest wildcat campaign Illinois has ever seen. The drop has been steady, month by month.

What the effect of the change from the old system of priorities to the new Controlled Materials Plan will be cannot now be determined. It appears that the plan will be slow in taking effect and the materials division of PAW is figuring on only 16,500 wells, of which 4500 would be wildcats (at wide variance with our estimate), which makes it look as though PAW is not now contemplating any increase in the allocation of steel to oil-country equipment—but on the contrary may expect less. (No water input wells are understood

to be included in PAW estimate foregoing.)

Another factor which in ordinary times would wield a heavy influence is the prospective number of wildcat wells for 1943. Our information as to what the industry is planning does not jibe with what PAW wants done, by a considerable margin, but, nevertheless, it does indicate a great many wildcat wells, some of which undoubtedly will open new fields. These new fields in former years would have meant considerable drilling, but it is our belief that in spite of new fields which may be found during the year the total number of wells drilled will not be greater than the tabulated estimate, unless other factors change the total.

Material Shortage Hurts

The tabulation shows in geographical detail the probable activity of the drilling industry during 1943. To enable a check to be made on the probable curtailment of activity below normal, the replies of the various companies as to desired drilling, if material and price situations were improved brought out that fact that in 1943 there would be drilled 57 percent more wells than are shown in the accompanying table. This would bring the wells companies would like to drill in 1943 up to within a comparatively few wells of 1941 figures.

The forecast indicates drilling expenditures of more than a quarter of a billion dollars, exclusive of all land, geological, prospecting and other expenses prior to moving in on the location.

More Wildcats

Unquestionably, extensive wildcatting programs will be put into effect in all states which show potential producing structures, and if the material and manpower bottlenecks permit, 1943 may show more wildcatting in the states now without production than for any like period in the history of the industry. Development of reserves, even of limited extent, in states now dependent upon long-distance transportation will add incentive to the widened scope of initial prospecting.

The wildcatting program, following as closely as possible upon the activities of geophysical exploration last year, accounts for the listing of from one to five wells in each of a number of states which have showed little or no activity over the past few years. Extensive blocks of acreage over known geological prospects and those indicated by sub-surface exploration are already being readied or are actually being drilled.

Foreign Prospects

Canada, Mexico and South America will see the bulk of drilling abroad. In the case of Canada and Mexico, it is likely that there will be an increase in operations. The situation in South America is dependent upon two things —demand for crude from those areas and availability of equipment. In Argentina, where the demand for crude far exceeds the production, the situation is tied up completely with equipment supply. If Argentina lines up against the Axis powers, it is probable that Argentina will be allowed to buy considerably more oil field equipment from the United States than she has had under the conditions of the past 12 months. Information from Colombia does not indicate an increase in drilling there during 1943. Venezuela's drilling campaign depends very closely upon the amount of oil withdrawn for export, a point of speculation, pro or con. There is no information to warrant the idea that Trinidad will see fewer operations in 1943.

Indicated Wells and Footage to Be Drilled in 1943

STATE OR DISTRICT	TOTAL WELLS				WILDCAT COMPLETIONS		FOOTAGE DRILLED*		
	Actual New Wells Completed 1942	Old Wells Drilled Deeper,'42	New Wells Forecast, 1943	Percent Change	Forecast 1943	Percent of NewWells, 1943	Actual 1942	Forecast, 1943	Percent Change
Alabama	3	0	5	+ 67	5	100	4,697	8,000	+ 70
Arizona	3	0	3	.....	3	100	9,662	10,000	+ 3
Arkansas	229	1	200	— 13	43	22	1,251,651	1,227,000	— 2
California	789	18	1,100	+ 41	165	15	3,444,243	4,510,000	+ 31
Colorado	15	0	30	+100	10	33	71,800	140,000	+ 95
Florida	1	0	4	+300	4	100	2,640	11,000	+320
Georgia	2	0	3	+ 50	3	100	6,519	10,000	+ 53
Illinois	2,030	91	1,800	— 11	475	25	5,254,274	4,813,000	— 8
Indiana	368	27	275	— 25	90	33	643,558	504,000	— 22
Iowa	0	0	4	.....	4	100	0	2,000	.....
Kansas	1,556	62	1,367	— 12	325	24	4,972,946	4,382,000	— 12
Kentucky	163	5	260	+ 54	100	38	259,137	423,000	+ 62
Louisiana:	913	0	703	— 34	195	28	6,064,392	5,102,000	— 16
North Louisiana	428	0	315	— 26	100	32	1,766,162	1,573,000	— 11
South Louisiana	485	0	388	— 19	95	24	4,298,230	3,529,000	— 17
Michigan	665	1	515	— 23	172	33	1,686,655	1,380,000	— 18
Mississippi	101	0	100	— 1	77	77	535,517	574,000	+ 7
Missouri	34	0	25	— 27	20	80	22,894	18,000	— 21
Montana	193	0	237	+ 23	13	6	425,947	507,000	+ 19
Nebraska	27	1	55	+104	25	45	66,072	134,000	+103
New Mexico	377	7	333	— 13	57	17	1,093,064	951,000	— 13
New York	1,228	0	1,150	— 6	50	4	1,611,034	1,502,000	— 6
North Dakota	0	0	1	.....	1	100	0	7,000	.....
Ohio	1,111	23	900	— 21	100	11	2,674,126	2,078,000	— 22
Oklahoma	1,306	148	1,110	— 24	277	25	4,372,809	3,813,000	— 13
Oregon	0	0	1	.....	1	100	0	3,000	.....
Pennsylvania	3,818	27	3,646	— 5	80	2	6,433,355	6,196,000	— 4
South Dakota	0	0	7	.....	7	100	0	28,000	.....
Tennessee	9	0	16	+ 79	9	56	14,370	23,000	+ 60
Texas:	5,075	123	3,944	— 18	908	22	21,531,654	16,662,000	— 23
East Texas (Including East Texas Field)	399	5	286	— 28	95	33	2,029,600	1,284,000	— 32
North Texas	865	45	740	— 18	180	24	2,374,924	2,035,000	— 14
South Texas†	1,278	7	1,019	— 21	297	29	6,379,569	5,339,000	— 16
Texas Gulf Coast (Lower)	772	5	642	— 17	127	20	4,618,984	4,003,000	— 13
Southwest Texas	399	2	300	— 25	125	42	1,426,762	1,103,000	— 23
South Central Texas	107	0	77	— 28	45	58	333,823	233,000	— 30
Texas Gulf Coast (Upper)	444	0	326	— 27	115	35	3,011,155	2,212,000	— 26
Texas Panhandle	360	7	343	— 5	8	2	1,102,840	1,071,000	— 3
West Texas	1,333	47	930	— 30	120	13	5,776,998	4,038,000	— 30
West Central Texas	381	12	300	— 21	93	31	856,568	683,000	— 20
Utah	0	0	5	.....	4	80	0	18,000	.....
Virginia	1	0	4	+300	3	75	1,113	5,000	+ 78
Washington	0	0	1	.....	1	100	0	3,000	.....
West Virginia	711	53	670	— 6	55	8	2,234,421	2,118,000	— 5
Wyoming	97	1	100	+ 2	7	7	368,824	445,000	+ 17
United States Total	20,824	588	18,574	— 10.8	3,289	17.71	65,056,261	57,607,000	— 11.45

* Footage drilled in 1942 and footage forecast for 1943 include respectively footage of wells drilled deeper in 1942 and that footage expected to be added by drilling old wells deeper in 1943.

† South Texas totals included in Texas state totals.

Forecast covers all new wells to be drilled in 1943, including salt-water-disposal wells and water- and gas-input wells for repressuring and secondary recovery.

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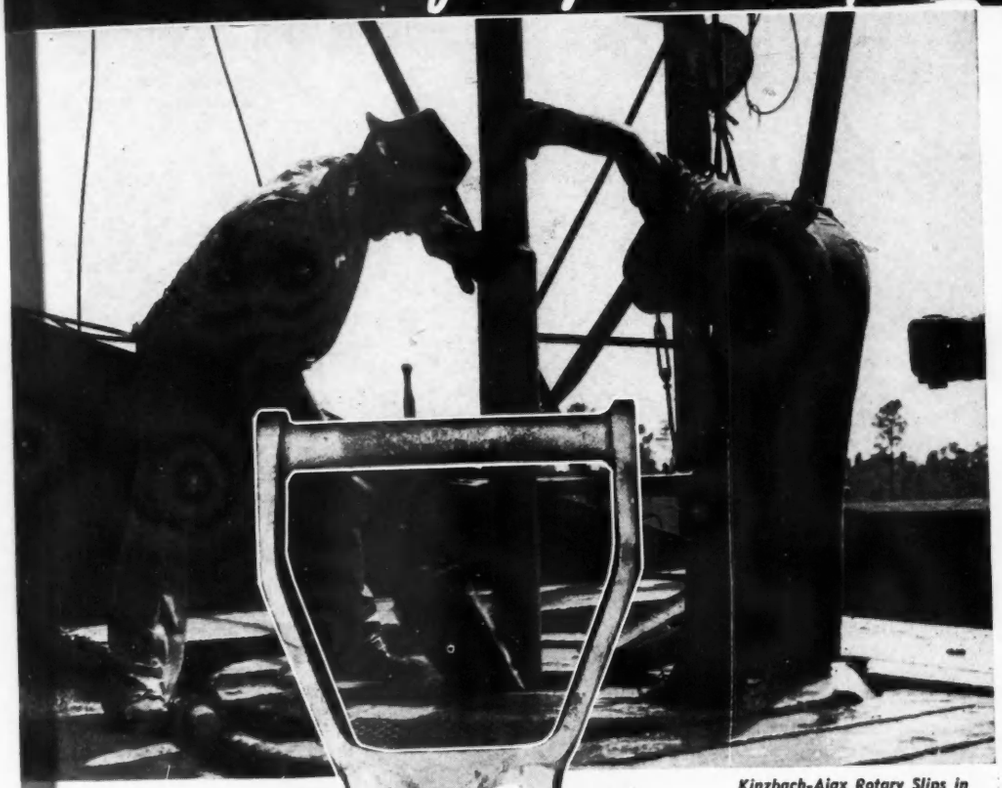

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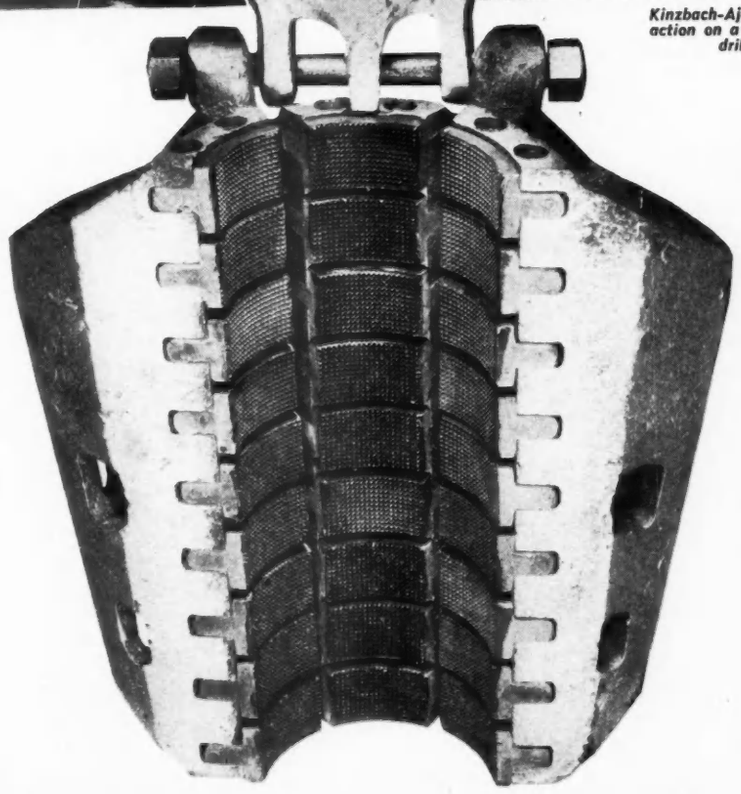

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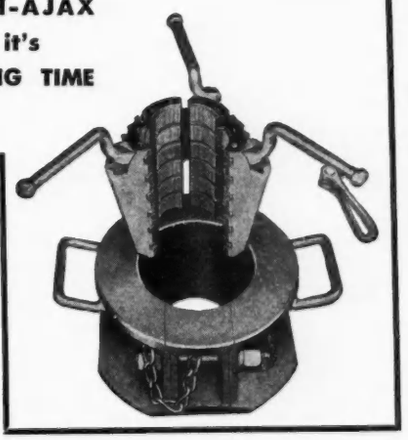

KINZBACH

Industry sees need for 7000 new artificial lift units and outlay of $25,000,000 in maintenance to keep pumping equipment operating during 1943

Pumping Equipment and Unit Maintenance Needs Forecast

DURING 1943 there will be an estimated 11,591 wells which will "go on the pump"; this expression being used to include all wells which are artificially agitated or produced other than solely by means of reservoir pressures. It thus incorporates in that total, wells which will be put on gas-lift, pumped with down-the-well units, and those at which the conventional above-ground and subsurface equipment will be employed.

Of this total of 11,591 wells, the survey upon which the total was based indicates that there should be sufficient, operable used equipment for approximately 4500 wells, including some anticipated shifting of now idle units to areas where the pumping duty is lighter than formerly carried. The 7000 wells not covered by replacement equipment must either be equipped with new pumping units or their production be lost by the industry until such time as priorities and other restrictions are lifted.

Cost of these 7000 new units, distributed over gas-lift and other types of equipment, is estimated to run between 9 and 11 million dollars, this figure being contingent in some areas on electric power and proper motors being available for well pumping without overloading utility facilities or overtaxing motor builders.

The estimate indicates, in addition to showing the number of lifting units required, that a total of 365,163 wells will be maintained, on an average, during the year. Outlay for maintenance costs on these units is estimated to total $25,122,000 for 1943.

During the past year, as study of the data on which the forecast is based shows, the backlog of flowing wells developed by previous drilling campaigns has begun to shift to the pumping-well column. This trend, especially noticeable in West Texas and New Mexico, may be expected to increase the demand for artificial lifts in such areas over the figure to be anticipated from the curtailment in drilling activity and probable number of producing wells finalled there during 1943.

In other areas, such as Kansas and Oklahoma, demand on wells now flowing in excess of their economic rate is expected to hasten the time when they must be put on the pump to maintain production, and this factor is considered when checking on the need for pumping units.

In still other areas, increase of waterflooding and other secondary-recovery methods, in the attempt to bolster production close to consuming centers, is expected to exert a slowing effect on the trend of wells to the pump, and may in isolated areas even show an increase in flowing wells in excess of the total number of producers finalled there during the year.

As in the estimate on pumping expenditures forecast for 1942, provision in the maintenance of many units which could more economically be replaced, were new equipment available for such purposes. Since, however, steel and other critical materials for pumping equipment are restricted and closely regulated, it is apparent that many areas will see much maintenance work done on units where the cost of such repair or rehabilitation for extending service life will cost as much as or more than the sales price of new and more efficient replacements.

The shifting of lifting equipment from field to field, and even state to state, in order to utilize the units which are no longer able to carry the load in their initial setting as the field ages and pumping loads increase, is expected to exceed even the rate observable in the latter half of 1942.

1943 Pumping Equipment Estimate

State or District	Number of Wells Likely to Go On Pump During 1943	Number Pumping Units, all Kinds, Including Gas-Lift Units, Probably Needed During 1943 in Addition to Available Used Equipment	Estimated Average Number Pumping Wells to be Maintained During 1943	Estimated Maintenance Cost, (Equipment Only) for All Pumping Wells in 1943
Arkansas	91	75	2,786	$ 209,000
California	760	700	17,460	5,325,000
Colorado	12	0	154	12,000
Illinois	1,163	1,100	25,464	1,656,000
Indiana	92	50	1,977	128,000
Kansas	696	600	22,364	1,789,000
Kentucky	82	82	14,341	358,000
Louisiana Total	724	400	5,286	423,000
North Louisiana	400	200	4,065	325,000
South Louisiana	324	200	1,221	98,000
Michigan	212	180	2,941	221,000
Mississippi	35	0	366	37,000
Missouri	2	2	95	6,000
Montana	154	100	2,307	196,000
Nebraska	11	0	94	8,000
New Mexico	276	184	1,130	226,000
New York	665	350	21,682	325,000
Ohio	190	75	25,600	704,000
Oklahoma	460	130	53,062	4,245,000
Pennsylvania	1,709	850	85,654	1,200,000
Texas, Total*	4,123	1,985	51,597	7,313,000
East Texas†	1,011	300	11,116	1,465,000
North Texas	520	80	17,669	1,160,000
South Texas	541	210	9,901	986,000
Upper Gulf Coast	305	175	2,834	283,000
Texas Panhandle	296	200	5,611	561,000
West Texas	1,278	1,000	6,729	2,355,000
West Central Texas	172	20	7,737	503,000
West Virginia	109	90	17,954	314,000
Wyoming	25	0	2,849	427,000
United States Total	11,591	6,953	365,163	$25,122,000

* Data on number of Texas wells to be maintained based upon Texas pumping wells at close of November, 1942, plus one-half of estimated other wells to go on pump during year.

† Figures on number of wells to go on pump in East Texas field, included in general East Texas area data, are based upon maintenance of salt water drive in East Texas field. Failure to maintain drive would put large additional number of wells on pump.

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War Actuates Natural Gas Use to Record Level

Consumption exceeds three trillion cubic feet, and should go higher as war continues expansion of industrial activity and need for aviation gasoline and synthetic rubber

ACCELERATED by mounting demands of war industries for fuel, production and consumption of natural gas in 1942 rose above three trillion cubic feet. The outlook is for continued rising demands in 1943.

Sales of natural gas for fuel rose 10.4 percent in totaling 1,772,994,000,000 cubic feet in 1942, according to figures of the American Gas Association. In addition to sales, more than 1,300,000,000,000 cubic feet are estimated to have been used in oil fields, at refineries and in making carbon black.

The outstanding development of the year was the mounting demands of war industries. Approximately 25 percent of the present deliveries of natural gas are being used by war industries as fuel, reports the American Gas Association. As a result industrial consumption of natural gas rose near 59 million cubic feet, 6.9 percent, over 1941. Total industrial sales for the year were 908,476,000,000 cubic feet, or over half of all natural gas fuel sales. The war also resulted in increased use of natural gas at petroleum refineries, it being a highly important source of ingredients needed in making both aviation gasoline and synthetic rubber.

With the United States industrial plants due to be operating on a more intensive scale in 1943 than ever before, the use of gas as fuel should be up considerably. Petroleum refineries also will be using larger quantities, as they produce greater volumes of aviation gasoline and get into synthetic rubber production on a bigger scale. Consequently, the use of natural gas as fuel and as a manufacturing raw product should increase in 1943, actuating the industry to new all-time peaks.

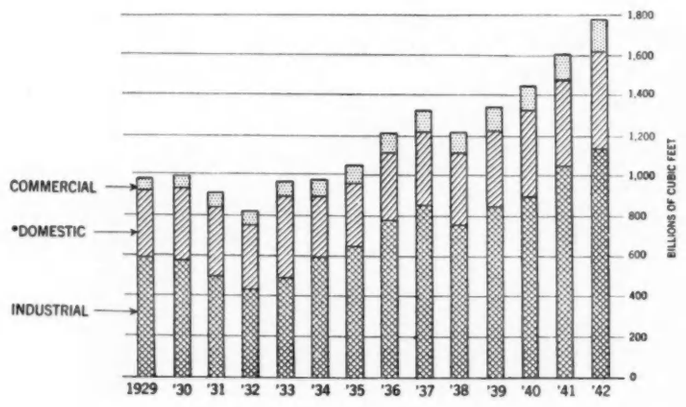
Some 232 billion cubic feet of natural gas were used as fuel for generating electric power in 1942, an increase of 29 billion cubic feet over 1941, or 14.3 percent. No doubt war demand for electricity had much to do with this sizeable increase.

In the domestic or household uses of gas, such as cooking, refrigeration, house heating, water heating, etc., sales of natural gas registered an increase of 13.3 percent, bringing sales for that purpose to 479,274,000,000 cubic feet.

As a result of the accelerated use of gas, WPB in the latter part of the year issued orders limiting certain uses of natural gas. The order prohibited new gas-heating installations in certain critical areas and provided for steps to be taken to curtail gas consumption in time of threatened shortages. Inability of gas companies to expand capacities to meet greatly increased demands for gas, due to being unable to obtain steel and other critical materials, made supply questionable in some regions and thus prompted WPB orders.

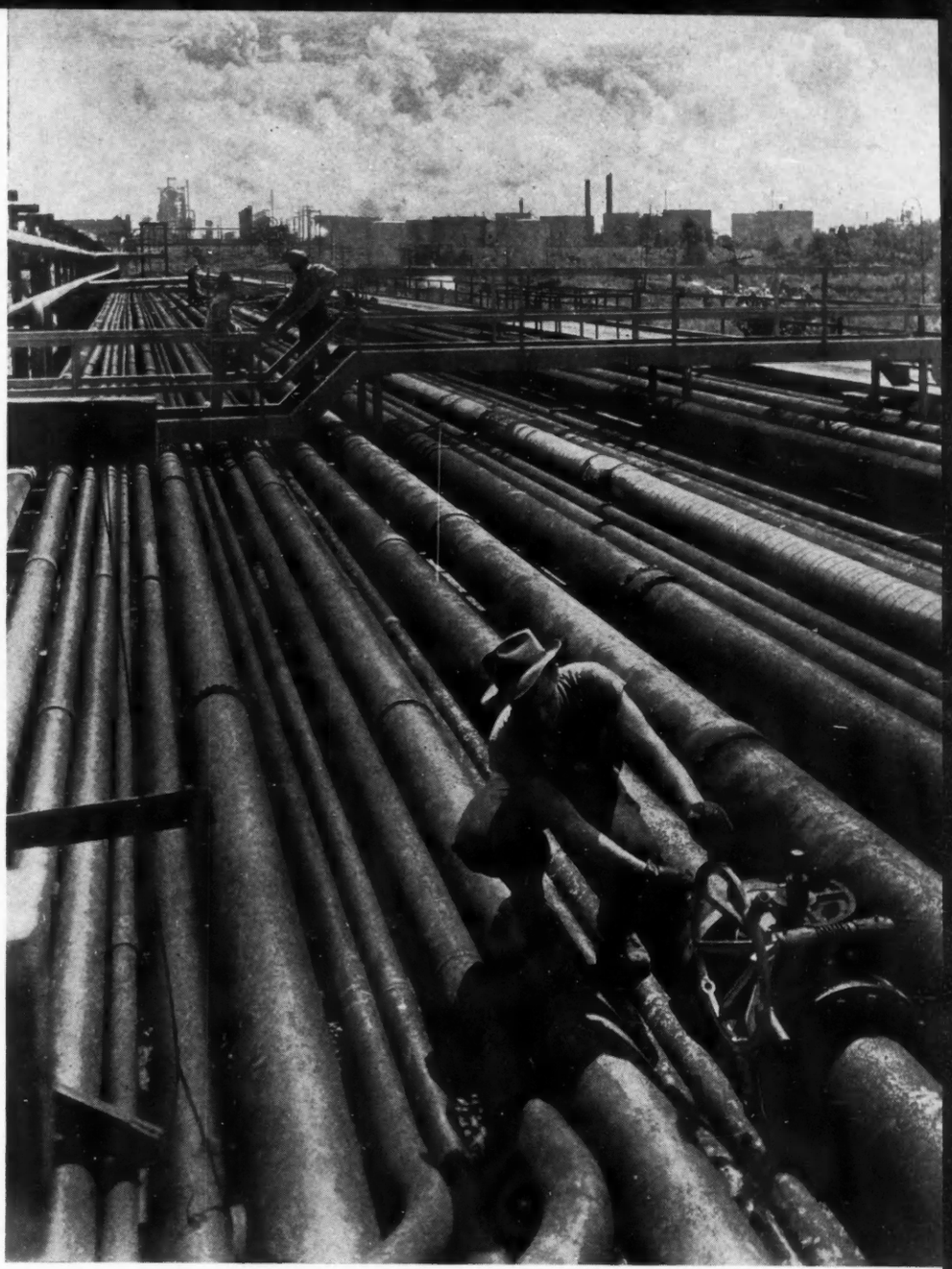
SALES OF NATURAL GAS

These data embrace principal marketing of natural gas for use as fuel, but do not include the extensive use in oil fields, at oil refineries, or in carbon-black manufacture.



	1942	1941	Percent Change
Customers			
*Domestic	7,870,000	7,554,000	+ 4.2
Commercial	595,000	578,000	+ 2.9
Industrial	51,000	49,000	+ 4.1
Total	8,516,000	8,181,000	+ 4.1
Gas Sales (MCF)			
*Domestic	479,274,000	423,013,000	+13.3
Commercial	153,226,000	130,405,000	+17.5
Industrial	908,476,000	849,565,000	+ 6.9
Electric Generation	232,018,000	202,990,000	+14.3
Total	1,772,994,000	1,605,973,000	+10.4
Revenue (Dollars)			
*Domestic	$316,458,000	$284,329,000	+11.3
Commercial	64,706,000	57,980,000	+11.6
Industrial & Electric Gen.	203,369,000	183,350,000	+10.9
Total	$584,533,000	$525,659,000	+11.2

* Including house heating.
Prepared by Statistical Department, American Gas Association.



Super aviation fuels must be made from carefully selected crude oils. Here at a Standard Oil Company (New Jersey) refinery many miles of pipe lines segregate these special crude oils, which have been shipped from various fields, and deliver them to the particular refinery units where 100-octane aviation gasoline is manufactured. The operator in the photograph is opening a valve to let a batch of this selected crude flow to its destination at the refinery, a section of which may be seen in the distance.

By GRADY TRIPLETT
Editor, Petroleum Refiner

War's Effect on Refining Will Be Permanent

Selective buying will give price preference to crudes with higher octane rating; manufacture of chemicals will grow in importance

REFINING in 1942 had immediate and temporary effects on the producer of crude oil with indications that permanent marks will be left from what is now taking place in manufacture.

The first influence of refining was trimming the daily oil requirement down to actual petroleum needs of the military program of the United Nations.

The immediate but perhaps temporary influence was the shifting of refinery output to plants capable of making war products.

The permanent influence indicated from these current trends is the prospect of the refining plant becoming more selective of its raw material in the future.

Fitting the overall requirement of refining to the war program came through normal channels as well as rationing of gasoline and the saving of tires. The net result for 1942 was that less crude oil was used than in 1941. With the last two months estimated, the daily charge to stills in the United States for 1942 was only 3,645,693 barrels per day, while

Save down-time

When your well is down for want of a wire line, for instance, or a length of pipe, tubing head, bottom hole pump, or any oil field tool—the chances are you'll save time by trying the Bethlehem Supply store first.

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the average for 1941 was 3,860,800 barrels.

Although it is certain that military requirements will dominate the consumption of crude oil for the duration of the war, indications are that total consumption of crude oil will for 1943 be higher than in 1942. In the Office of the Petroleum Administrator for War, 3,800,000 barrels per day is considered the minimum from which adequate critical petroleum products can be made.

Location of units for advanced processing of crude oil made for non-uniform purchases of crude oil, a situation that will become more favorable as the plant-expansion program is completed during 1943. As evidence of this, the refining plants along the Texas-Louisiana Gulf Coast are making more than half the 100-octane aviation gasoline. These plants do not represent half the nation's total refining plants, still they have more than half the industry's equipment for making this product. In consequence purchases of crude oil have been fitted to the convenience of these plants. Distance and lack of transportation have left it impractical to continue the former ration of crude oil purchases under these circumstances.

Octane Rating

This one product, 100-octane aviation gasoline, will serve to illustrate the trend, which promises to leave permanent imprint upon oil production. Along with making crude-oil purchases near refining plants, refiners have learned that there are differences in crude oils on the octane rating basis. One field is thus favored over another because of the inherent anti-knock quality of its crude oil.

Thus far the anti-knock quality has had no influence on the price of crude oil for the reason that restrictions of government have shoved normal economy aside. With the return of competition, it is likely that the octane rating of crude oil will become a part of the quality rating by which prices are fixed.

Trend of Refinery Input and Major Product Output

	1942	1941
INPUT:		
Crude runs	1,330,678,000	1,409,192,000
Natural Gasoline runs	57,500,000	47,825,000
OUTPUT: (Major Products)		
Gasoline*	590,000,000	671,000,000
Distillate Fuel	200,000,000	189,177,000
Residual Fuel	360,000,000	342,367,000

Data based upon Bureau of Mines reports with November and December estimated.
* Only gasoline produced by refining operations; does not include natural gasoline produced at gasoline plants.

And the prospect is that still other qualities within crude oil will come to have a bearing on its dollar value to the producer. Under the stress of war crude oil has become the source for a score of chemicals, those essential for synthetic rubber being only two. The producer may be little concerned about methods by which butadiene and styrene, synthetic rubber ingredients, are had from crude oil. He is concerned when he is fortunate enough to have a crude oil that lends itself to least processing in obtaining these products, for that will mean a higher price for his crude oil.

A few crude oils hold substantial amounts of toluol, the petroleum ingredient for tri-nitro-toluol (TNT), hence it is the working of simple economics for these oils to bring higher cash income from the plant, which is equipped to extract this one hydrocarbon.

Perhaps here is a place to give the oil producer assurance that the taking of chemicals or the making of chemicals from crude oil is nothing of temporary nature. The research chemist is not given to premature predictions, hence not many statements concerning the future of synthetic rubber have come from the men responsible for the rubber.

Future of Chemical Rubber

It is, however, the violation of no confidence to report that these men are convinced that chemical rubber will supplant the latex of the Hevea tree. They are convinced that it will win its place in competition rather than through the protection of cartels and tariffs. These convictions are based on what has been accomplished, what is indicated in current laboratory work plus the fact that in all other instances American ingenuity has been capable of so making its synthetic products that natural products never could again compete.

For all the faith technologists have in chemical rubber, it is of little consequence as to volume. So much has been printed about chemical rubber, that even the petroleum industry has hardly dared to compute what it means in volume. Less than one half of one percent of the current output of crude oil in the United States will provide all the petroleum ingredients the synthetic rubber contemplates. As a product this rubber is vital; in its volume it is trivial so far as the oil producer is concerned.

Oil for Chemicals

Fortunately the research chemist now looks to oil for scores of products which formerly came from vegetation. No one will call for any great amount of oil. Their total will enhance the demand by a substantial amount.

Shortly it is hoped that the business of mankind will cease to be destruction and the need for toluol as an explosive will cease. But toluol and other benzine hydrocarbons can be used as solvents in the paint and plastics industries. Ammonia, synthesized from methane, is going into explosives but there will be an increased need for this product once hostilities cease, for it is essential to the fertilizer industry.

Oil will yield phenols, resins, alcohols and formaldehyde, to list a few of the chemicals now being made by refining. It has taken a global war to compress 20 years of normal development into two years of accomplishment in these processes. This development, however, will be of lasting benefit to the oil producers.

Refinery Operating Trends in 1942

(Figures from Bureau of Mines, except for November and December, 1942, which are estimated)

	CRUDE RUNS TO STILLS (Barrels)				PERCENT YIELD OF MAJOR PRODUCTS					
	Daily Average		Monthly Total		Gasoline		Residual Fuel		Distillate Fuel	
MONTH	1942	1941	1942	1941	1942	1941	1942	1941	1942	1941
January	3,711,000	3,570,000	115,022,000	110,683,000	44.6	42.8	24.7	25.3	14.2	15.4
February	3,649,000	3,587,000	102,155,000	100,445,000	42.8	43.3	25.8	25.9	14.4	14.7
March	3,567,000	3,583,000	110,565,000	111,059,000	41.8	43.4	25.4	25.1	14.7	13.8
April	3,496,000	3,704,000	104,882,000	111,106,000	39.9	43.7	28.1	24.6	13.4	13.2
May	3,448,000	3,853,000	106,883,000	119,435,000	39.9	44.2	29.0	23.8	12.6	13.0
June	3,513,000	3,865,000	105,376,000	115,935,000	37.8	44.5	26.9	24.4	14.4	12.7
July	3,599,000	3,909,000	111,555,000	121,180,000	38.6	44.6	27.0	23.6	14.5	13.0
August	3,682,000	4,018,000	114,135,000	124,572,000	39.0	44.0	26.7	24.0	14.9	12.4
September	3,782,000	4,049,000	113,474,000	121,481,000	37.9	44.6	26.8	23.1	15.9	13.2
October	3,757,000	4,089,000	116,381,000	126,772,000	38.6	44.2	26.9	24.3	16.2	13.1
November	3,732,000	4,051,000	116,228,000	121,539,000	....	45.2	....	24.4	....	13.4
December	3,678,000	4,032,000	114,022,000	124,985,000	....	45.7	....	24.9	....	13.7
Total or Average	3,645,693	3,860,800	1,330,678,000	1,409,192,000	....	....	....	....	....	....

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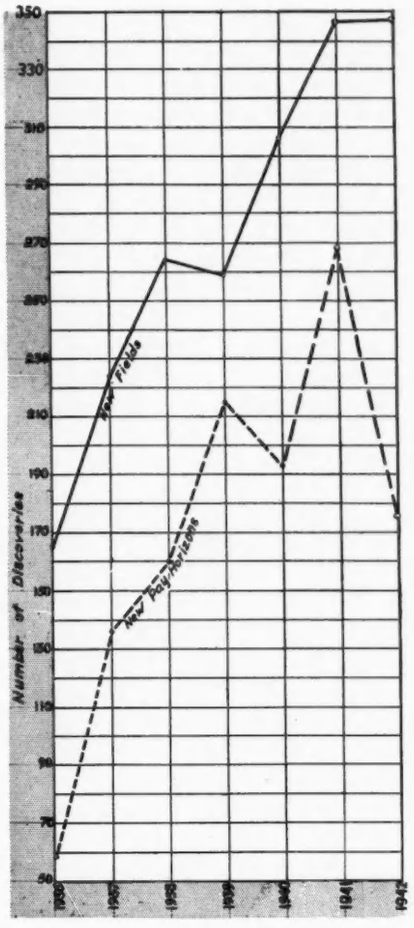
A Twin Disc Power Take-off is incorporated in this Cardwell Model PO sideboom which is mounted on a Caterpillar D8 Tractor. This machine is owned by C. S. Foreman Construction Company, Kansas City, Missouri, and is shown cradling pipe for a painting and priming machine on the War Emergency Pipe Line.

Wildcat Results in 1942 Unsatisfactory

New producing fields found up slightly, but sharp drop in finding new pays in old fields curbs 1942 total discoveries to 523 compared with 608 in 1941

By L. J. LOGAN, Associate Editor



UNDER the restrictions imposed by the war, the petroleum industry was unable to achieve in 1942 a satisfactory record in wildcatting and finding new oil and gas fields to compensate for continued heavy drafts on established reserves.

Much fewer wildcats than normal were drilled, and discoveries fell materially short of the number hoped for under the drilling program laid out by the government at the beginning of the year. Both oil and gas fields were found in numbers substantially under those regarded by the government as essential for properly maintaining reserves.

Data on new producing fields and pay horizons found in 1942 appear in tabular form beginning on page 97.

The plans for exploratory development were fulfilled to the extent that a larger than normal proportion of drilling represented wildcatting—3166 tests having been genuine wildcats (not counting semi-wildcats or extension attempts), out of a total of 21,412 wells completed, or 15 percent of the total. Dry holes of the year, including those in fields, were down only 19 percent, compared with a 33.5 percent decrease in all completions.

Nevertheless, with drilling in general restricted and discouraged, the volume of wildcatting was insufficient to provide the essential number of discoveries, even though the proportion represented by wildcats was above normal.

Under the program designed to protect crude and natural gas reserves, there was sought a total of 4000 wildcats in 1942, calculated to yield 624 new sources of oil, 116 gas producing areas, and 3260 unproductive tests. Actually, only 3166 wildcats were drilled,

Total Number of Discoveries and Depths of Pay in All Discoveries (New Fields and Pays) in 1942, Compared with Earlier Years

State or District	All Discoveries, 1942 (New Fields and New Pays)			DISCOVERIES IN EARLIER YEARS																							
				New Fields Found						New Pays Found						Total All Discoveries						Average Depth of All Discoveries					
	Discovery Wells	Footage to Bottoms of Pays	Average Depth	1941	1940	1939	1938	1937	1936	1941	1940	1939	1938	1937	1936	1941	1940	1939	1938	1937	1936	1941	1940	1939	1938	1937	1936
Arkansas	7	45,560	6,509	5	3	3	4	3	1	....	1	....	....	2	....	5	4	3	4	5	1	7528	5546	6879	6207	6822	4900
California	6	33,809	5,635	10	1	4	8	6	7	5	1	....	5	2	....	15	2	4	13	8	7	5941	7252	8251	7489	7975	5950
Illinois	85	211,833	2,492	41	30	33	16	8	1	29	10	8	....	2	....	70	40	41	16	10	1	2640	2612	2500	2590	2633	1037
Indiana	14	28,440	2031	8	6	11	5	1	....	2	1	7	1	....	....	10	7	18	6	1	....	1696	1954	1763	1708	2174	....
Kansas	53	175,063	3303	49	33	33	43	52	71	19	16	17	7	5	1	68	49	50	50	57	72	3360	3216	2943	3396	3293	3325
Kentucky	6	13,866	2311	3	3	4	3	2	1	....	1	4	1	....	1	3	4	8	4	2	2	1066	1512	1619	1588	1385	1362
Louisiana	46	352,989	7674	29	20	14	20	19	5	49	39	59	47	19	13	78	59	73	67	38	18	7809	6025	8019	7185	6521	6087
North Louisiana	9	37,077	4120	12	4	..	1	4	....	4	1	1	3	1	1	16	5	1	4	5	1	4867	4083	8901	6969	5645	5175
South Louisiana	37	315,912	8538	17	16	14	19	15	5	45	38	58	44	18	12	62	54	72	63	33	17	8569	7967	8080	7400	7398	6998
Michigan	19	56,584	2978	18	26	16	19	5	12	7	1	3	2	....	....	25	27	19	21	5	12	2466	2102	1772	2099	2970	2553
Mississippi	1	3,679	3679	2	1	1	....	....	....	....	1	1	....	....	....	2	2	2	....	....	....	4066	5617	4719	....	....	....
Missouri	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	400	....	....	....	....
Montana	4	7,941	1985	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Nebraska	....	....	....	1	1	1	....	....	....	2	....	....	....	....	....	3	1	1	....	....	....	2347	2453	2282	....	....	....
New Mexico	8	21,717	2715	5	8	5	7	3	....	1	....	1	....	....	....	6	8	6	7	3	....	2710	2214	3003	....	....	....
Oklahoma	62	233,899	3773	53	46	22	18	18	....	21	17	14	1	4	2	74	63	36	19	22	2	3360	3144	3891	4720	4177	4165
Texas	203	985,457	4854	117	125	107	113	104	64	132	92	97	94	100	39	249	217	204	207	204	103	4452	4649	4135	4303	4039	3842
Eastern Texas	9	50,936	5648	5	3	3	4	4	3	4	2	....	3	1	....	9	5	3	7	5	3	4781	5899	3260	5689	5547	4915
E. Tex. Border Co.	1	6,010	6010	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
East Texas Field	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Rest of East Texas	8	44,926	5616	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
North Texas	44	182,714	4153	38	35	34	19	20	8	28	10	16	10	10	2	66	45	50	29	30	10	3516	3210	2824	3190	2596	1811
West Central Texas	30	71,513	2384	13	14	15	17	6	6	11	3	3	5	2	....	24	17	18	22	8	6	2807	2399	2006	2746	2555	2416
West Texas	24	115,138	4797	14	18	9	12	17	9	7	2	3	....	....	....	21	20	12	12	17	9	4236	3666	3760	3823	3498	3877
Texas Panhandle	1	3,226	3226	....	....	1	2	1	....	....	....	....	....	2	....	....	....	1	2	3	....	....	....	2895	3126	3164	....
Gulf Coast, Upper	27	193,513	7167	18	14	10	10	15	16	14	11	10	16	18	7	32	25	20	26	33	23	7060	7559	7281	6921	6741	5970
South Texas	68	368,417	5418	29	41	35	49	41	22	68	64	65	60	67	30	97	105	100	109	108	52	4652	5159	4622	4631	4175	4061
Gulf Coast, Lower	49	287,972	5877	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Southwest Texas	15	62,011	4134	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
South Central Texas	4	18,434	4609	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Virginia	1	1,113	1113	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Wyoming	8	36,144	4518	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total United States	523	2,208,094	4222	341	304	254	256	221	162	267	180	211	158	134	56	608	484	465	414	355	218	4352	3444	4253	4039	4005	3694

Total Footage and Average Total Depths Drilled in Wildcat Tests of 1942

STATE OR DISTRICT	PRODUCTIVE WILDCATS			UNPRODUCTIVE WILDCATS			ALL WILDCATS		
	Wells	Footage	Average Depth	Wells	Footage	Average Depth	Wells	Footage	Average Depth
Alabama	..	..	..	3	4,697	1,556	3	4,697	1,566
Arizona	..	..	..	3	9,662	3,221	3	9,662	3,221
Arkansas	7	47,032	6,719	44	208,008	4,727	51	255,040	5,001
California	6	33,878	5,646	116	512,266	4,416	122	33,878	278
Colorado	..	..	..	3	17,421	5,807	3	17,421	5,807
Florida	..	..	..	1	2,640	2,640	1	2,640	2,640
Georgia	..	..	..	2	6,519	3,260	2	6,519	3,260
Illinois	85	222,844	2,662	456	1,049,642	2,302	541	1,272,486	2,352
Indiana	14	28,896	2,064	102	181,426	1,779	116	210,322	1,813
Kansas	53	180,443	3,405	316	1,153,640	3,651	369	1,334,083	3,615
Kentucky	6	14,769	2,462	33	53,388	1,618	39	68,157	1,748
Louisiana	46	416,068	9,045	106	669,149	6,313	152	1,085,217	7,140
North Louisiana	9	60,036	6,671	65	295,683	4,549	74	355,719	4,807
South Louisiana	37	356,032	9,622	41	373,466	9,109	78	729,498	9,353
Michigan	19	56,766	2,988	161	393,304	2,443	180	450,070	2,500
Mississippi	1	3,679	3,679	55	300,496	5,464	56	304,175	5,432
Missouri	..	..	..	26	20,114	774	26	20,114	774
Montana	4	7,959	1,990	3	15,886	5,295	7	23,845	3,406
Nebraska	..	..	..	15	37,030	2,469	15	37,030	2,469
New Mexico	8	23,153	2,894	42	124,105	2,955	50	147,258	2,945
Oklahoma	62	254,581	4,106	234	891,212	3,809	296	1,145,793	3,871
Tennessee	..	..	..	7	12,344	1,763	7	12,344	1,763
Texas	203	1,098,784	5,413	909	3,601,802	3,962	1,112	4,700,586	4,227
East Texas Border Co.	1	6,202	6,202	2	6,361	3,181	3	12,563	4,188
East Texas Field	..	..	..	..	..	..	..	..	..
Rest of East Texas	8	48,725	6,091	91	392,597	4,314	99	441,322	4,458
North Texas	44	198,072	4,502	189	479,949	2,539	233	678,021	2,910
West Central Texas	30	76,284	2,543	114	222,766	1,954	144	299,050	2,077
West Texas	24	123,195	5,133	113	474,498	4,199	137	597,693	4,363
Texas Panhandle	1	3,256	3,256	3	23,909	7,970	4	27,165	6,291
Gulf Coast, Upper	27	215,040	7,964	88	621,569	7,063	115	836,609	7,275
Gulf Coast, Lower	49	337,247	6,883	113	672,750	5,954	162	1,009,997	6,235
Southwest Texas	15	70,573	4,705	138	519,356	3,763	153	589,929	3,856
South Central Texas	4	20,190	5,048	58	188,047	3,242	62	208,237	3,359
Virginia	1	1,113	1,113	..	..	..	1	1,113	1,113
Wyoming	8	40,151	5,019	6	24,077	4,013	14	64,228	4,588
*Total United States	523	2,430,116	4,646	2,643	9,288,828	3,515	3,166	11,206,678	3,540

* Not including data on the limited wildcatting in the Appalachian states.

exclusive of extension tests or semi-wildcats; and instead of 624 new oil producing areas to show for the year's prospecting, there were recorded for 1942 only 466 oil discoveries, including 15 distillate fields; while in place of the 116 gas fields sought, there were in fact 57 gas field discoveries, counting many of inferior grade. By reason of drilling only three fourths as many wildcats as planned, similarly, the number of wildcat failures was only about 80 percent of the number contemplated. By including semi-wildcats or extension tests, of course, the volume of exploratory drilling in 1942 would be considerably above the figures given; but records on such tests were not kept during the year, and cannot be offered here. Included in the above statistics, however, are new pay horizons opened for production in 1942.

The 523 total discoveries of the year compared with 608 in 1941. New fields of 1942 totaled 348, against 341 in 1941, a slight increase in that classification. But new pay horizons discovered in 1942 totaled only 175, against 267 in 1941.

Among the 348 new fields of 1942 were 288 that produced oil, 13 yielding distillate, and 47 yielding gas. The 175 new pays included 163 producing oil, 2 yielding distillate, and 10 representing gas discoveries.

The average producing depth for the 523 total new field and new pay discovery wells of 1942 was 4222 feet, compared with 4352 feet for the 608 discoveries of 1941. For the 348 *new fields* of 1942, the average producing depth was 3862 feet, with oil discoveries averaging 3837 feet, distillate discoveries 7997 feet, and gas discoveries 2870 feet. For the 175 *new pays* of the year, the average producing depth was 4938 feet, with oil discoveries averaging 4974 feet, distillate pays 6192 feet, and gas discoveries 4110 feet.

Whereas the average producing depth of the 523 total discoveries of 1942 was 4222 feet, the average *total* depth for the 523 productive wildcats was 4646 feet, in reflection of the usual practice of first drilling ahead to explore deeper horizons before finally plugging back and completing the wildcats in promising strata penetrated higher up.

For the 2643 unproductive wildcats of 1942, the average depth reached was 3515 feet, and because of the preponderance of the failures among all wildcats, the average depth reached in the 3166 wildcats of 1942 was 3540 feet.

Depths of Pays in *New Fields* Found in 1942

STATE OR DISTRICT	OIL			GAS			DISTILLATE			TOTAL NEW FIELDS 1942			TOTAL NEW FIELDS 1941
	Discovery Wells	Footage to Bottoms of Pays	Average Depth	Discovery Wells	Footage to Bottoms of Pays	Average Depth	Discovery Wells	Footage to Bottoms of Pays	Average Depth	Discovery Wells	Footage to Bottoms of Pays	Average Depth	Discovery Wells
Arkansas	3	19,405	6468	1	2,817	2817	3	23,338	7779	7	45,560	3175	5
California	4	24,122	6031	..	..	..	..	..	..	4	24,122	6031	10
Illinois	41	108,676	2651	5	2,848	570	..	..	..	46	111,524	2424	41
Indiana	11	23,018	2092	..	..	..	..	..	..	11	23,018	2092	8
Kansas	43	141,106	3282	4	12,856	3214	..	..	..	47	153,962	3276	49
Kentucky	4	8,940	2235	..	..	..	..	..	..	4	8,940	2235	3
Louisiana	11	70,303	6391	3	12,754	4251	6	49,946	8324	20	133,003	6650	29
North Louisiana	6	25,392	4232	1	2,180	2180	2	9,505	4753	9	37,077	4190	12
South Louisiana	5	44,911	8982	2	10,574	5287	4	40,441	10110	11	95,926	8721	17
Michigan	13	36,198	2784	2	3,094	1547	..	..	..	15	39,292	2619	18
Mississippi	1	3,679	3679	..	..	..	..	..	..	1	3,679	3679	2
Montana	2	5,634	2817	2	2,307	1153	..	..	..	4	7,941	1985	..
Nebraska	..	..	..	..	..	..	..	..	..	..	..	..	1
New Mexico	6	12,262	2044	2	9,455	4728	..	..	..	8	21,717	2715	5
Oklahoma	41	163,224	3981	11	29,102	2646	..	..	..	52	192,326	3699	53
Texas	105	479,229	4564	15	53,505	3567	4	30,676	7669	124	563,410	4544	117
Eastern Texas	6	36,195	6033	2	9,191	4596	..	..	..	8	45,386	5673	5
East Texas Border Counties	1	6,010	6010	..	..	..	..	..	..	1	6,010	6010	..
East Texas Field	..	..	..	..	..	..	..	..	..	..	..	..	..
Rest of East Texas	5	30,185	6037	2	9,191	4596	..	..	..	7	39,376	5625	..
North Texas	31	129,180	4167	1	3,400	3400	..	..	..	32	132,580	1018	38
West Central Texas	14	25,420	1816	5	12,368	2474	..	..	..	19	37,788	1989	13
West Texas	16	76,802	4800	..	..	..	..	..	..	16	76,802	4800	14
Texas Panhandle	..	..	..	1	3,226	3226	..	..	..	1	3,226	3226	..
Gulf Coast, Upper	8	59,370	7421	1	3,348	3348	2	16,511	8256	11	79,229	7203	18
South Texas	30	152,262	5075	5	21,972	4394	2	14,165	7082	37	188,399	5092	29
Gulf Coast, Lower	19	105,267	5540	4	16,246	4061	2	14,165	7082	25	135,678	5427	..
Southwest Texas	8	30,447	3806	1	5,726	5726	..	..	..	9	36,173	4019	..
South Central Texas	3	16,548	5516	..	..	..	..	..	..	3	16,548	5516	..
Virginia	1	1,113	1113	..	..	..	..	..	..	1	1,113	1113	..
Wyoming	2	8,134	4067	2	6,142	3071	..	..	..	4	14,276	3569	..
Total United States	288	1,105,043	3837	47	134,880	2870	13	103,960	7997	348	1,343,883	3862	341

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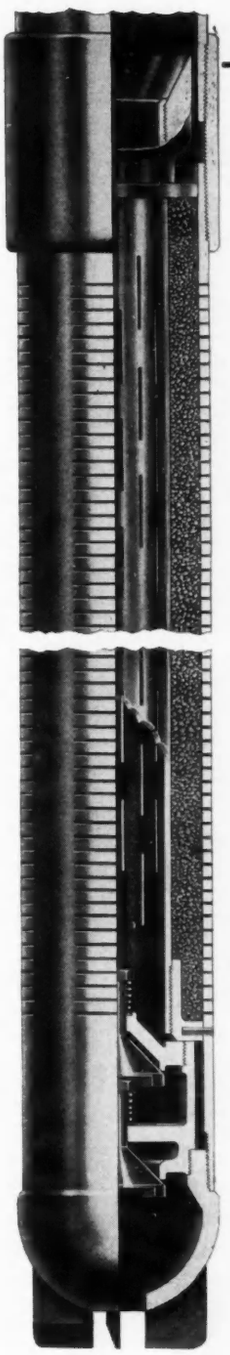

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NEVER BEFORE has the value of Layne Hydro-Pak been more evident. Its use considerably reduces the amount of critical materials needed to provide satisfactory screening of your wells . . . it will also protect the materials and equipment used for production by doing a far better job of separation.

The Layne Hydro-Pak is the greatest screening element ever put into a well. Specially selected gravel is hydraulically packed between two slotted pipe screens. As the sand laden fluid passes through the countless channels between the gravel, its velocity is lowered, cutting action greatly reduced, and the sand in fluid is prevented from entering the tubing.

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HOUSTON, TEXAS

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Footage Drilled Declines Less Than Volume of Completions

As against 33.5 percent decrease in well completions, footage drilled slumps 31.8 percent. Consequently, average depth of all wells drilled is slightly greater in 1942 than during 1941

THE average depth of all wells drilled in the United States in 1942 was slightly greater than the average for 1941, with the result that total footage involved was down in a somewhat smaller proportion than was the volume of drilling.

As against the decrease of 33.5 percent in the number of wells completed in 1942, compared with 1941, there was a decline of only 31.8 percent in total footage drilled.

The 21,412 wells of all classes completed in 1942, with average depth 3038 feet, involved 65,056,261 feet of hole.

Footage and Average Depths Drilled in United States in 1941 and 1942 by states appear on page 72.

The 33,210 wells of 1941, having averaged 2963 feet per well, required 95,452,534 feet of drilling.

In increasing to 3038 feet, the average depth of United States wells reversed the trend of the previous year, and reflected shifting of drilling to areas of relatively greater pay depths and reduced drilling in some areas of less than national average depth.

Illinois, for example, with an average drilling depth below that of the nation, had a sharp decrease in drilling (46%), and therefore had relatively less effect on the national average depth in 1942.

Average Drilling Depths

YEAR	Wells Completed	Footage Drilled	Average Depth per Well
1925	25,406	73,677,400	2900
1926	28,995	81,186,000	2800
1927	22,301	66,903,000	3000
1928	19,964	59,892,000	3000
1929	23,463	67,925,285	2895
1930	19,848	57,557,200	2900
1931	11,716	34,259,110	2924
1932	14,290	43,033,422	3011
1933	13,145	38,464,500	2926
1934	20,793	55,103,538	2650
1935	24,273	66,632,035	2745
1936	28,546	80,068,851	2805
1937	33,945	101,105,230	2979
1938	28,060	87,841,493	3131
1939	27,658	84,114,990	3037
1940	30,656	93,971,162	3065
1941	32,210	95,452,534	2963
1942	21,412	65,056,261	3038

Similarly, Kansas, Oklahoma, North Texas, West Central Texas, Ohio, Indiana, Kentucky, Montana, and Wyoming are below the national average in their drilling depths, and all of them had substantial or sharp decreases in drilling activity.

Tending to hold down the national average depth, however, was the fact that drilling continued relatively heavy in the Appalachian states, which have comparatively shallow wells. In Pennsylvania, the wells average less than 1700 feet, and that state drilled almost as many wells in 1942 as in 1941. Wells in New York are even shallower, and New York had a 10 percent increase in completions. West Virginia, with wells averaging less than 2600 feet, had a decrease of only 1.3 percent in completions.

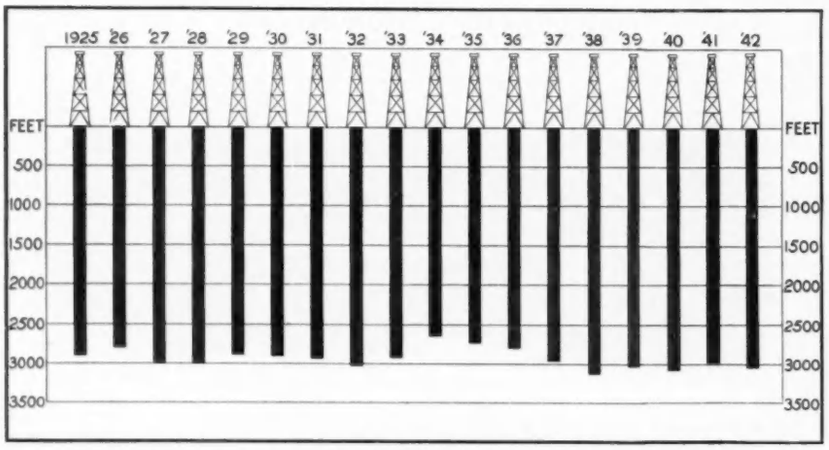
Included in the above total of footage drilled in 1942 is 243,176 feet involved in deepening 588 old wells, scattered through numerous states. In these deepening operations, footage averaged 413 feet per well, although there were wide variations by districts. In Texas the average deepening operation involved 488 feet, in Oklahoma, 263 feet, in Kansas, 241 feet, in California, 423 feet per well.

The 64,813,085 feet drilled in 20,824 new wells in 1942 indicated an average depth of 3112 feet for those wells.

Over 3,000,000 feet of 1942 drilling was accounted for by wells other than those drilled strictly for oil or gas, namely, water input, gas input, and salt water disposal wells. Water input wells, mainly in Pennsylvania and New York, in the water flooding development in those states, accounted for 3,251,122 feet of drilling, the total for 2141 wells, an average of 1518 feet per well. Gas input wells, totaling 70, involved 111,611 feet, an average of 1594 feet per well, and were largely in North Texas, Oklahoma and Illinois. The 46 salt water disposal wells here included averaged 1916 feet deep and indicated total footage drilled of 88,150. The salt water wells were mainly in Illinois, Kansas, and Oklahoma, while there were a few also in Texas.

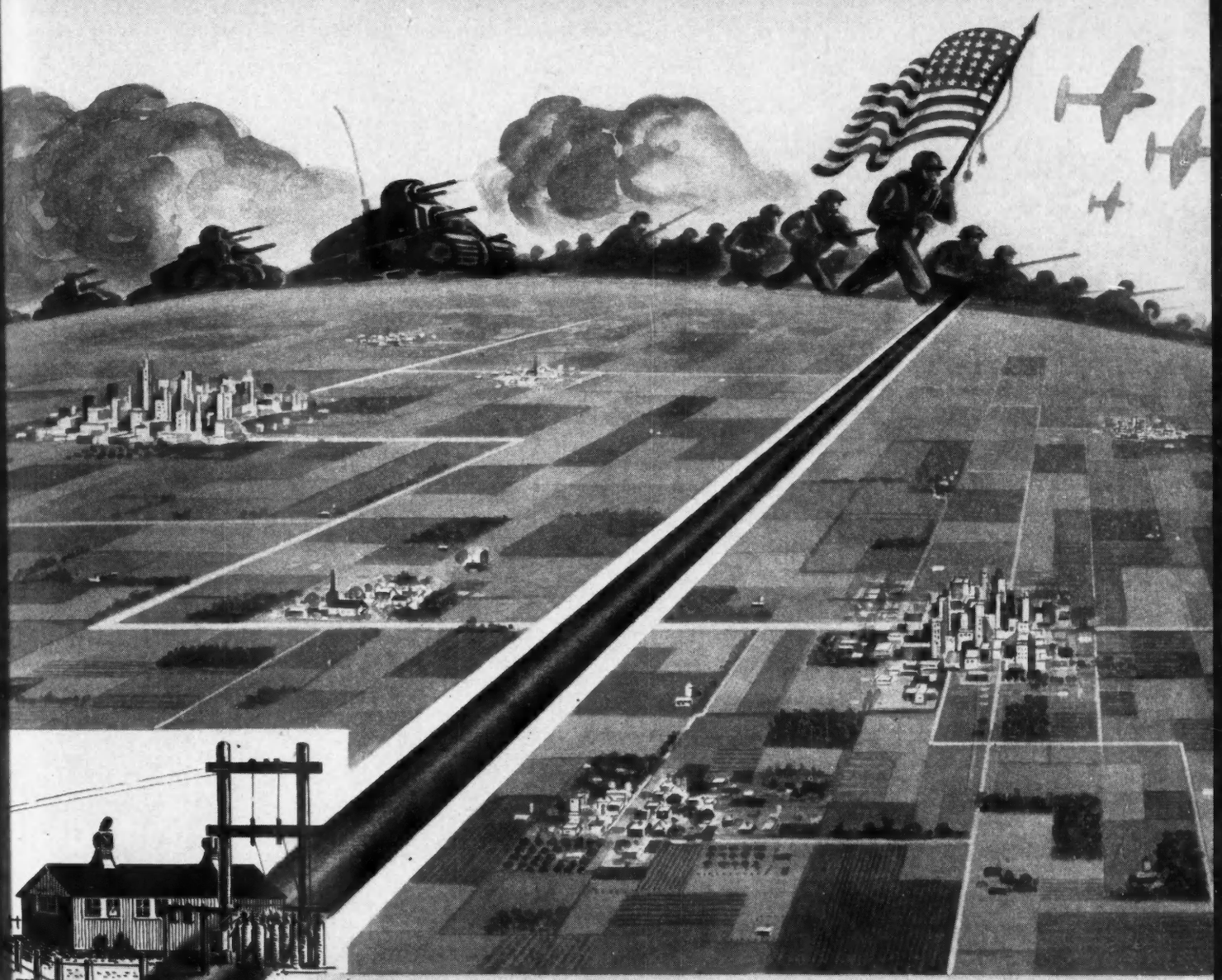
New wells that were drilled strictly for oil or gas numbered 18,567, and their combined footage 61,362,202, an average of 3304 feet per well. These wells included drilling in fields and in wildcat areas. In the proven fields, including discovery wells of new fields of the year, there were 15,924 wells drilled to depths totaling 52,068,769 feet, an average of 3269 feet per well.

The average drilling depth in wildcat tests was considerably greater than in proven fields, as 2643 unproductive wildcats (excluding discovery wells of new fields) involving 9,293,433 feet, an average of 3516 feet per well.



Graphic portrayal of average depth variation in annual completions of United States for past 18 years.

LIFELINE of a nation at war



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Wells, Footage, and Average Depths Drilled in the United States in 1941 and 1942

	NEW WELLS OF 1942														
	Drilled for Oil or Gas						Water Input			Gas Input			Salt Water Disposal		
	In Fields, (Including Discovery Wells of New Fields, New Pays, and Extensions)			Wildcats, Unproductive											
	Wells	Footage	Average Depth	Wells	Footage	Average Depth	Wells	Footage	Average Depth	Wells	Footage	Average Depth	Wells	Footage	Average Depth
Alabama	....	....	....	3	4,697	1,566	....	....	....	..	....	....	....	....	....
Arizona	....	....	....	3	9,662	3,221	....	....	....	..	....	....	....	....	....
Arkansas	185	1,041,466	5629	44	208,008	4727	....	....	....	..	....	....	....	....	....
California	673	2,924,356	4345	116	512,266	4416	....	....	....	..	....	....	....	....	....
Colorado	12	54,379	4531	3	17,421	5807	....	....	....	..	....	....	....	....	....
Florida	....	....	....	1	2,640	2640	....	....	....	..	....	....	....	....	....
Georgia	....	....	....	2	6,519	3260	....	....	....	..	....	....	....	....	....
Illinois	1,542	4,114,481	2668	456	1,049,642	2302	....	....	....	14	29,507	2108	18	30,172	1676
Indiana	266	454,186	1707	102	181,426	1779	....	....	....	..	....	....	....	....	....
Iowa	....	....	....	....	....	....	....	....	....	..	....	....	....	....	....
Kansas	1,228	3,775,830	3074	316	1,153,640	3651	....	....	....	1	3,495	3495	11	24,991	2272
Kentucky	129	202,975	1573	33	53,388	1618	....	....	....	1	1,257	1257	....	....	....
Louisiana	807	5,395,243	6685	106	669,149	6313	....	....	....	..	....	....	....	....	....
North Louisiana	363	1,470,479	4050	65	295,683	4549	....	....	....	..	....	....	....	....	....
South Louisiana	444	3,924,764	8839	41	373,466	9109	....	....	....	..	....	....	....	....	....
Michigan	504	1,289,375	2558	161	393,304	2443	....	....	....	..	....	....	....	....	....
Mississippi	46	235,021	5109	55	309,496	5464	....	....	....	..	....	....	....	....	....
Missouri	8	2,780	347	26	20,114	774	....	....	....	..	....	....	....	....	....
Montana	190	410,061	2158	3	15,886	5295	....	....	....	..	....	....	....	....	....
Nebraska	12	28,982	2415	15	37,030	2469	....	....	....	..	....	....	....	....	....
New Mexico	335	967,677	2888	42	124,105	2955	....	....	....	..	....	....	....	....	....
New York	726	969,082	1335	....	....	....	502	641,952	1279	..	....	....	....	....	....
Ohio	1,104	2,661,247	2410	....	....	....	....	....	....	7	3,223	469	....	....	....
Oklahoma	1,039	3,388,126	3260	234	891,212	3809	2	3,508	1754	19	28,947	1524	12	21,954	1830
Pennsylvania	2,198	3,825,719	1741	....	....	....	1,620	2,592,000	1600	..	....	....	....	....	....
Tennessee	2	2,026	1013	7	12,344	1763	....	....	....	..	....	....	....	....	....
Texas	4,117	17,799,465	4323	909	3,606,407	3967	17	13,662	804	27	41,053	1520	5	11,033	2207
East Texas Border Counties	....	....	....	2	10,966	5483	....	....	....	..	....	....	....	....	....
East Texas Field	16	57,963	3623	....	....	....	....	....	....	..	....	....	1	160	160
Rest of East Texas	297	1,548,669	5214	91	392,597	4314	2	5,282	2641	..	....	....	2	9,657	4829
North Texas	637	1,845,905	2897	189	479,949	2539	14	7,909	565	24	22,673	945	1	374	374
West Central Texas	265	628,580	2372	114	222,766	1954	1	471	471	..	....	....	1	842	842
West Texas	1,220	5,284,017	4331	113	474,498	4199	....	....	....	..	....	....	....	....	....
Texas Panhandle	357	1,074,296	3009	3	23,909	7970	....	....	....	..	....	....	....	....	....
Gulf Coast, Upper	355	2,382,616	6711	88	621,569	7063	....	....	....	1	6,970	6970	....	....	....
Gulf Coast, Lower	658	3,933,691	5978	113	672,750	5954	....	....	....	1	7,100	7100	....	....	....
Southwest Texas	260	897,952	3453	138	519,356	3763	....	....	....	1	4,310	4310	....	....	....
South Central Texas	52	145,776	2803	58	188,047	3242	....	....	....	..	....	....	....	....	....
Utah	....	....	....	....	....	....	....	....	....	..	....	....	....	....	....
West Virginia	711	2,186,477	3075	....	....	....	....	....	....	..	....	....	....	....	....
Wyoming	90	339,815	3775	6	24,077	4013	....	....	....	1	4,129	4129	....	....	....
Total United States	15,924	52,068,769	3269	2,643	9,293,433	3516	2,141	3,251,122	1518	70	111,611	1594	46	88,150	1916

Wells, Footage, and Average Depths Drilled in the United States in 1941 and 1942 —Continued

	Total New Wells of 1942 (Total of Above Groups)			Wells Drilled Deeper, 1942			All Wells, 1942			All Wells, 1941			Percent Change of 1942 from 1941	
	Wells	Footage	Average Depth	Wells	Footage	Average Depth	Wells	Footage	Average Depth	Wells	Footage	Average Depth	Wells	Footage
Alabama	3	4,697	1565	....	....	....	3	4,697	1565	5	17,371	3474	— 40.0	— 72.9
Arizona	3	9,662	3221	....	....	....	3	9,662	3221	..	....	....	....	....
Arkansas	229	1,249,474	5456	1	2,177	2177	230	1,251,651	5441	185	816,575	4413	+ 24.3	+ 53.2
California	789	3,436,622	4355	18	7,621	423	807	3,444,243	4267	1,118	6,142,767	5495	— 27.8	— 43.9
Colorado	15	71,800	4786	....	....	....	15	71,800	4786	21	68,797	3276	— 28.6	+ 4.3
Florida	1	2,640	2640	....	....	....	1	2,640	2640	1	1,280	1280	....	+106.2
Georgia	2	6,519	3259	....	....	....	2	6,519	3259	1	1,501	1501	+100.0	+334.3
Illinois	2,030	5,223,802	2573	91	30,472	334	2,121	5,254,274	2477	3,935	9,197,674	2337	— 46.1	— 42.8
Indiana	368	635,612	1727	27	7,946	2942	395	643,558	1629	546	970,386	1777	— 27.7	— 33.6
Iowa	....	....	....	....	....	....	....	....	....	6	14,006	2334	....	....
Kansas	1,556	4,957,956	3186	62	14,990	241	1,618	4,972,946	3073	2,217	6,627,634	2037	— 27.0	— 24.9
Kentucky	163	257,620	1580	5	1,517	303	168	259,137	1542	335	352,311	1051	— 49.9	— 26.4
Louisiana	913	6,064,392	6642	....	....	....	913	6,064,392	6642	1,557	8,779,971	5639	— 41.4	— 30.9
North Louisiana	428	1,766,162	4126	....	....	....	428	1,766,162	4126	702	2,089,666	2963	— 39.0	— 15.1
South Louisiana	485	4,298,230	8862	....	....	....	485	4,298,230	8862	855	6,699,305	7835	— 43.3	— 35.8
Michigan	665	1,682,679	2530	1	3,976	3976	666	1,686,655	2532	885	1,997,893	2257	— 24.7	— 15.5
Mississippi	101	535,517	5302	....	....	....	101	535,517	5302	198	978,939	4944	— 49.0	— 45.2
Missouri	34	22,894	673	....	....	....	34	22,894	673	85	60,391	709	— 60.0	— 62.0
Montana	193	425,947	2206	....	....	....	193	425,947	2206	250	534,225	2136	— 22.8	— 20.2
Nebraska	27	66,912	2444	1	60	60	28	66,972	2359	93	193,493	2080	— 69.9	— 65.8
New Mexico	377	1,091,782	2895	7	1,282	183	384	1,093,064	2846	397	1,121,255	2824	— 3.3	— 2.5
New York	1,228	1,611,034	1311	....	....	....	1,228	1,611,034	1311	1,119	1,481,932	1323	+ 9.7	+ 8.8
Ohio	1,111	2,664,470	2398	23	9,656	419	1,134	2,674,126	2358	1,774	3,294,549	1857	— 36.1	— 18.8
Oklahoma	1,306	4,333,747	3318	148	39,062	263	1,454	4,372,809	3007	2,162	5,837,569	2686	— 32.7	— 24.7
Pennsylvania	3,818	6,417,719	1680	27	15,636	579	3,845	6,433,355	1673	3,944	6,691,530	1696	— 2.5	— 3.8
Tennessee	9	14,370	1591	....	....	....	9	14,370	1596	23	30,339	1319	— 60.9	— 52.6
Texas	5,075	21,471,620	4230	123	60,034	488	5,198	21,531,654	4142	10,439	37,867,398	3627	— 50.2	— 43.1
East Texas Border Counties	2	10,966	5483	....	....	....	2	10,966	5483	33	132,518	4016	— 93.9	— 91.7
East Texas Field	17	58,123	3419	....	....	....	17	58,123	3419	513	1,855,516	3617	— 96.7	— 96.8
Rest of East Texas	392	1,956,205	4990	5	4,396	861	397	1,960,511	4938	570	2,615,581	4589	— 30.4	— 25.0
North Texas	865	2,356,810	2724	45	18,114	402	910	2,374,924	2609	2,462	5,349,709	2169	— 63.0	— 55.5
West Central Texas	381	852,659	2237	12	3,909	325	393	856,568	2179	645	1,189,972	1831	— 39.1	— 27.4
West Texas	1,333	5,758,515	4319	47	18,483	393	1,389	5,776,998	4186	2,365	9,699,936	4101	— 41.6	— 40.4
Texas Panhandle	360	1,098,205	3050	7	4,635	662	367	1,102,840	3005	708	2,134,252	3014	— 48.2	— 48.3
Gulf Coast, Upper	444	3,011,155	6781	....	....	....	444	3,011,155	6781	742	4,653,178	6271	— 40.2	— 35.2
Gulf Coast, Lower	772	4,613,541	5976	5	5,443	1088	777	4,618,984	5944	1,304	7,285,587	5587	— 40.4	— 36.6
Southwest Texas	399	1,421,618	3562	2	5,144	2572	401	1,426,762	3558	808	2,462,684	3048	— 50.4	— 42.0
South Central Texas	110	333,823	3034	....	....	....	110	333,823	3034	289	506,465	1752	— 61.9	— 34.0
Utah	....	....	....	....	....	....	....	....	....	3	10,956	3652	....	....
West Virginia	711	2,186,477	3075	53	47,944	904	764	2,234,421	2924	774	2,007,477	2594	— 1.3	+ 11.3
Wyoming	97	368,021	3794	1	803	803	98	368,824	3763	137	386,114	2818	— 28.5	— 4.4
Total United States	20,824	64,813,085	3112	588	243,176	413	21,412	65,056,261	3038	32,210	95,452,534	2963	— 33.5	— 31.8

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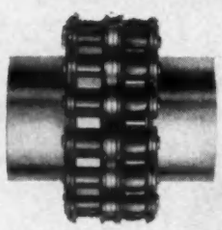

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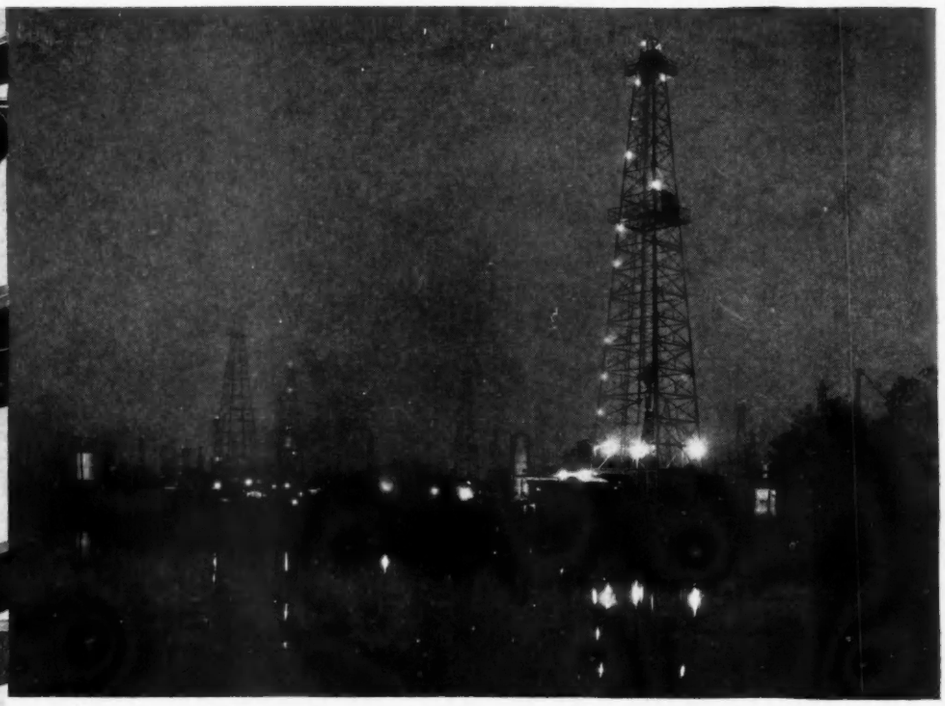

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One Third Fewer Wells Are Completed During 1942

Wartime equipment difficulties and spacing regulations are the cause of drastic slump

ONE THIRD fewer wells were drilled in 1942 than in 1941 by the petroleum industry of the United States, under the necessity of conserving on the use of equipment and materials. Revised figures show that 21,412 wells of all kinds were completed by the industry during the year, or 33.5 percent less than the near-peak number of 32,210 in 1941. This record for 1942 represented a fairly close adherence to the program laid down by the government at the beginning of the year, as that schedule called for a 40 percent curtailment, or 19,000 wells.

There was some success, also, in the government's program of encouraging wildcatting by making materials and equipment available for exploratory tests, as attested by the fact that dry holes represented a larger proportion of completions in 1942 than in 1941. Out of the 21,412 completions of 1942, there were 5638 dry holes, representing 26 percent of the total. Among the 32,210 completions of 1941, there had been 6984 dry holes, constituting 22 percent of that year's total. Whereas there had been much drilling of inside locations on comparatively close spacing in 1941, it was necessary in 1942 to eliminate such wells, and to expend materials and equipment in either wildcatting or efficient development of fields.

Disregarding new wells not drilled for oil or gas (water input, gas input, and salt water disposal), and considering only new wells drilled strictly for oil or gas (not old wells deepened), there were 18,567 such completions in 1942. Of that total, 11,059, or 60 percent, produced oil or distillate and 1870, or 10 percent, produced gas, while 5638, or 30 percent were dry holes, divided nearly equally between fields and wildcat locations (2995 in fields and 2643 wildcats). Those 5638 dry holes of 1942 in fields and wildcat areas represented a decrease of only 19 percent in completions of that classification—from 6984 in 1941—as contrasted with the 33.5 percent decrease in completions of all kinds.

Completion statistics by fields begin on page 129.
Breakdown of wells completed in 1942 and 1941 by states on page 76.

Along with the new drilling, deepening operations were sharply curtailed in 1942. For the year, 588 old wells were drilled to greater depths, compared with 823 in 1941, a decrease of 29 percent, or nearly the same as for all completions. The deepening operations occurred largely in Illinois, Kansas, Oklahoma, North Texas and West Texas, while there were some also in Indiana, Kentucky, Michigan and Nebraska.

Along with the new and old wells drilled strictly for oil and gas, the industry completed during 1942 a total of 2257 miscellaneous wells, as compared with 2349 in 1941. These totals consisted predominantly of water input wells in Pennsylvania and New York, where drilling was maintained in 1942 at approximately the same level as in 1941. North Texas had 14 water input well completions in 1942.

Wells Drilled for Oil and Gas in the United States—1859-1942

Cumulative totals—1859-1922, Bureau of Mines; 1923-1942, weekly reports by The Oil Weekly

	NEW WELLS											
	FOR OIL OR GAS						OTHER NEW WELLS					
YEAR	Oil	Gas	Distillate	Total Productive Wells	Dry Holes	Total New For Oil or Gas	Water Input	Gas Input	Salt Water Disposal	Total New Wells	Old Wells Drilled Deeper	Total Completions
1859-1922	[3]481,863	[1]14,542	.....	496,405	118,948	615,353	....	....	.....	615,353	.....	615,353
1923	13,407	1,892	.....	15,299	5,214	20,513	....	....	.....	20,513	.....	20,513
1924	14,311	2,250	.....	16,561	5,152	21,713	....	....	.....	21,713	.....	21,713
1925	16,162	2,644	.....	18,806	6,600	25,406	....	....	.....	25,406	.....	25,406
1926	17,787	2,848	.....	20,635	8,360	28,995	....	....	.....	28,995	.....	28,995
1927	13,396	2,586	.....	15,982	6,319	22,301	....	....	.....	22,301	.....	22,301
1928	10,982	2,733	.....	13,715	6,249	19,964	....	....	.....	19,964	.....	19,964
1929	13,125	3,109	.....	16,234	7,229	23,463	....	....	.....	23,463	.....	23,463
1930	10,745	3,006	.....	13,751	6,097	19,848	....	....	.....	19,848	.....	19,848
1931	6,618	2,090	.....	8,708	3,008	11,716	....	....	.....	11,716	.....	11,716
1932	10,151	1,012	.....	11,163	3,127	14,290	....	....	.....	14,290	.....	14,290
1933	7,828	994	.....	8,822	3,369	12,191	954	....	.....	13,145	.....	13,145
1934	13,066	1,353	.....	14,419	4,678	19,097	1,696	....	.....	20,793	.....	20,793
1935	15,301	1,719	.....	17,020	5,588	22,608	1,665	....	.....	24,273	.....	24,273
1936	18,432	2,323	.....	20,755	5,695	26,450	2,096	....	.....	28,546	.....	28,546
1937	22,481	2,500	.....	24,981	6,370	31,351	2,594	....	.....	33,945	.....	33,945
1938	18,544	1,913	.....	20,457	6,133	26,590	1,470	....	.....	28,060	.....	28,060
1939	17,687	1,943	.....	19,630	6,670	26,300	1,358	....	.....	27,658	.....	27,658
1940	19,225	2,023	.....	21,248	6,770	28,018	1,988	....	.....	30,006	650	30,656
1941	19,472	2,582	.....	22,054	6,984	29,038	2,185	117	47	431,387	823	32,210
1942	10,954	1,870	105	12,929	5,638	18,567	2,141	70	46	20,824	588	21,412
Total	771,537	[2]57,932	105	829,574	234,198	1,063,772	18,147	187	93	1,082,199	2,061	1,084,260

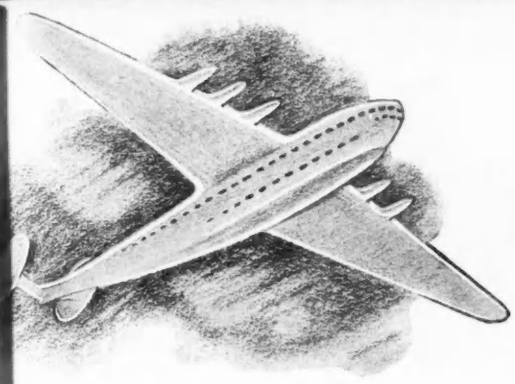
[1] Gas wells during the period prior to 1916 were included with oil wells. [2] Includes only gas wells completed since 1916. [3] Includes gas wells completed prior to 1916.

Wells Completed by the Petroleum Industry in the United States in 1942 Compared with 1941

STATE OR DISTRICT	NEW WELLS DRILLED FOR OIL OR GAS: Oil †1941	Oil 1942	Gas 1941	Gas 1942	Distillate †1941	Distillate 1942	*Total Productive 1941	*Total Productive 1942	Percent Change	Dry Holes: In Fields ‡1941	In Fields 1942	Wildcats ‡1941	Wildcats 1942	Total Dry 1941	Total Dry 1942	Percent Change	Total New For Oil or Gas 1941	Total New For Oil or Gas 1942	Percent Change
Alabama													3	5	3	—40.0	5	3	—40. 0
Arizona													3		3			3	
Arkansas	108	103	4			45	112	148	+ 32.1		37		44	71	81	+ 14.1	183	229	+ 25.1
California	917	568	22	8			939	576	— 38.7		97		116	179	213	+ 19.0	1,118	789	— 29.4
Colorado	8	6	4	1			12	7	— 41.7		5		3	8	8		20	15	— 25.0
Florida													1	1	1		1	1	
Georgia													2	1	2	+100.0	1	2	+100.0
Illinois	2,787	1,177	13	11			2,800	1,118	— 57.5		354		456	849	810	— 4.6	3,649	1,998	— 45.2
Indiana	262	129	52	24			314	153	— 51.3		113		102	203	215	+ 5.9	517	368	— 28.8
Iowa														6			6		
Kansas	1,432	846	72	82			1,504	928	— 38.3		300		316	587	616	+ 4.9	2,091	1,544	— 26.2
Kentucky	133	69	7	2			140	71	— 49.3		58		33	177	91	— 48.6	317	162	— 48.9
Louisiana	1,015	585	96	40		11	1,111	636	— 42.8		171		106	443	277	— 37.5	1,554	913	— 41.2
North Louisiana	429	272	78	26		4	507	302	— 40.4		61		65	193	126	— 34.7	700	428	— 38.9
South Louisiana	586	313	18	14		7	604	334	— 44.7		110		41	250	151	— 39.6	854	485	— 43.2
Michigan	413	310	84	75			497	385	— 22.5		119		161	385	280	— 27.3	882	665	— 24.6
Mississippi	151	36	4				155	36	— 76.8		10		55	42	65	+ 54.8	197	101	— 48.7
Missouri			18	2			18	6	— 66.7		2		26	67	28	— 58.2	85	34	— 60.0
Montana	139	126	61	46			200	172	— 14.0		18		3	50	21	— 58.0	250	193	— 22.8
Nebraska	39	10					39	10	— 74.4		2		15	42	17	— 59.5	81	27	— 66.7
New Mexico	297	261	15	12			312	273	— 12.5		62		42	81	104	+ 28.4	393	377	— 4.1
New York	674	711	3	6			677	717	+ 5.9		9			1	9	+800.0	678	726	+ 7.1
Ohio	421	235	770	510			1,191	745	— 37.4		359			457	359	— 21.4	1,648	1,104	— 33.0
Oklahoma	1,169	625	154	95			1,323	720	— 45.6		319		234	607	553	— 8.9	1,930	1,273	— 34.0
Pennsylvania	1,722	1,802	409	285			2,131	2,087	— 2.1		111			122	111	— 9.0	2,253	2,198	— 2.4
Tennessee			5	2			5	2	— 60.0				7	18	7	— 61.1	23	9	— 60.9
Texas	7,575	3,155	275	170		49	7,850	3,374	— 57.0		743		909	2,441	1,652	— 32.3	10,291	5,026	— 51.2
East Texas Border Counties	7		11				18						2	15	2	— 86.7	33	2	— 93.9
East Texas Field	490	10					490	10	— 98.0		6			18	6	— 66.7	508	16	— 96.9
Rest of East Texas	376	231	37	15		7	413	253	— 38.7		44		91	152	135	— 11.2	565	388	— 31.3
North Texas	1,565	396	12	5		1	1,577	402	— 74.5		235		189	829	424	— 48.9	2,406	826	— 65.7
West Central Texas	274	144	37	24			311	168	— 46.0		97		114	330	211	— 36.1	641	379	— 40.9
West Texas	2,110	1,122	11	13			2,121	1,135	— 46.5		85		113	191	198	+ 3.7	2,312	1,333	— 42.3
Texas Panhandle	636	277	45	63			681	340	— 50.1		17		3	26	20	— 23.1	707	360	— 49.1
Gulf Coast, Upper	548	265	25	17		7	573	289	— 49.6		66		88	169	154	— 8.9	742	443	— 40.3
Gulf Coast, Lower	972	504	47	25		33	1,019	562	— 44.8		96		113	273	209	— 23.4	1,292	771	— 40.3
Southwest Texas	444	174	46	7		1	490	182	— 62.9		78		138	309	216	— 30.1	799	398	— 50.2
South Central Texas	153	32	4	1			157	33	— 79.0		19		58	129	77	— 40.3	286	110	— 61.5
Utah			1				1							2			3		
West Virginia	115	118	508	494			623	612	— 1.8		99			119	99	— 16.8	742	711	— 4.2
Wyoming	95	78	5	5			100	83	— 17.0		7		6	20	13	— 35.0	120	96	— 20.0
Total United States	19,472	10,954	2,582	1,870		105	22,054	12,929	— 41.4		2,995		2,643	6,984	5,638	— 19.3	29,038	18,567	— 36.1

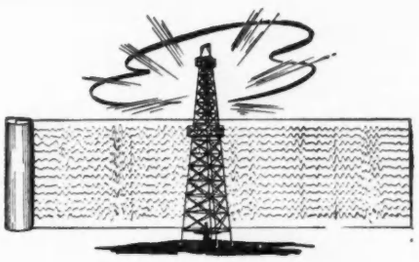
* In fields and wildcats. † Distillate wells included with oil wells in 1941. ‡ Not available.

STATE OR DISTRICT	OTHER NEW WELLS: Water Input 1941	Water Input 1942	Gas Input 1941	Gas Input 1942	Salt Water Disposal 1941	Salt Water Disposal 1942	TOTAL NEW WELLS 1941	TOTAL NEW WELLS 1942	Percent Change	OLD WELLS DRILLED DEEPER: Oil 1941	Oil 1942	Gas 1941	Gas 1942	Dry 1941	Dry 1942	Total 1941	Total 1942	Percent Change	TOTAL ALL WELLS 1941	TOTAL ALL WELLS 1942	Percent Change
Alabama							5	3	— 40.0										5	3	— 40.0
Arizona								3												3	
Arkansas							183	229	+ 25.1	1				1	1	2	1	— 50.0	185	230	+ 24.3
California							1,118	789	— 29.4		17				1		18		1,118	807	— 27.8
Colorado							20	15	— 25.0					1		1			21	15	— 28.6
Florida							1	1											1	1	
Georgia							1	2	+100.0										1	2	+100.0
Illinois			32	14	12	18	3,693	2,030	— 45.0	206	71			36	20	242	91	— 62.4	3,935	2,121	— 46.1
Indiana			1		2		520	368	— 29.2	14	13		4	12	10	26	27	+ 3.8	546	395	— 27.7
Iowa							6												6		
Kansas	2			1	16	11	2,109	1,556	— 26.2	95	43	2	1	11	18	108	62	— 42.6	2,217	1,618	— 27.0
Kentucky	5		1	1			323	163	— 49.5	8	3			4	2	12	5	— 58.3	335	168	— 49.9
Louisiana							1,554	913	— 41.2					3		3			1,557	913	—41.40
North Louisiana							700	428	— 38.9					2		2			702	428	— 39.0
South Louisiana							854	485	— 43.2					1		1			855	485	— 43.3
Michigan							882	665	— 24.6	3					1	3	1	— 66.7	885	666	— 24.7
Mississippi					1		198	101	— 49.0										198	101	— 49.0
Missouri							85	34	— 60.0										85	34	— 60.0
Montana							250	193	— 22.8										250	193	— 22.8
Nebraska							81	27	— 66.7	10	1			2		12	1	— 91.7	93	28	— 69.9
New Mexico							393	377	— 4.1	2	7			2		4	7	+ 75.0	397	384	— 3.3
New York	441	502					1,119	1,228	+ 9.7										1,119	1,228	+ 9.7
Ohio	57		51	7			1,756	1,111	— 36.7	1	6	15	13	2	4	18	23	+ 27.8	1,774	1,134	— 36.1
Oklahoma	3	2	19	19	10	12	1,962	1,306	— 33.4	159	100	7	11	34	37	200	148	— 26.0	2,162	1,454	— 32.7
Pennsylvania	1,675	1,620					3,928	3,818	— 2.8		2	14	19	2	6	16	27	+ 68.8	3,944	3,845	— 2.5
Tennessee							23	9	— 60.9										23	9	— 60.9
Texas	2	17	13	27	6	5	10,312	5,075	— 50.8	77	87	7	6	43	30	127	123	— 3.1	10,439	5,198	— 50.2
East Texas Border Counties							33	2	— 93.9										33	2	— 93.9
East Texas Field					5	1	513	17	— 9.7										513	17	— 96.7
Rest of East Texas		2			1	2	566	392	— 30.7				1	4	4	4	5	+ 25.0	570	397	— 30.4
North Texas	1	14	12	24		1	2,419	865	— 64.2	22	29	1	1	20	15	43	45	+ 4.7	2,462	910	— 63.0
West Central Texas		1	1			1	642	381	— 40.7	2	8		2	1	2	3	12	+300.0	645	393	— 39.1
West Texas	1						2,313	1,333	— 42.4	42	40	1		9	7	52	47	— 9.6	2,365	1,380	— 41.6
Texas Panhandle							707	360	— 49.1	1	6				1	1	7	+600.0	708	367	— 48.2
Gulf Coast, Upper				1			742	444	— 40.2										742	444	— 40.2
Gulf Coast, Lower				1			1,292	772	— 40.2	9	4		1	3		12	5	— 58.3	1,304	777	— 40.4
Southwest Texas				1			799	399	— 50.1	1		5	1	3	1	9	2	— 77.8	808	401	— 50.4
South Central Texas							286	110	— 61.5					3		3			289	110	— 61.9
Utah							3												3		
West Virginia							742	711	— 4.2	4	4	24	44	4	5	32	53	+ 65.6	774	764	— 1.3
Wyoming				1			120	97	— 19.2	15	1	2				17	1	— 94.1	137	98	— 28.5
Total United States	2,185	2,141	117	70	47	46	31,387	20,824	— 33.7	595	355	71	98	157	135	823	588	— 28.6	32,210	21,412	— 33.5



OIL FOR THE PEACE TO COME

IS BEING FOUND BY *General* TODAY



Today's abundance of oil required for successful conclusion of the war is the result of long-range geophysical planning. And by the same token, tomorrow's oil is being found today . . . oil for the peace to come when our "pursuit of happiness" will require undreamed of quantities of petroleum synthetics and aviation gasoline. GENERAL'S seasoned seismologists, working in close collaboration with major oil producers, are helping to map the structures that will produce part of that oil for the future.

General
GEOPHYSICAL COMPANY HOUSTON

Usual Growth in Number of Producing Wells Retarded

ALTHOUGH the number of producing oil wells in the United States reached a new all-time peak of 407,257 at the end of 1942, the net gain of 3675 for the year (over 403,582 at end of 1941) was only 42 percent of the average annual increase of 8773 for the decade 1931-1941. The net gain in oil wells of 3675 for 1942 compared with 10,066 in 1941.

There was in 1942, therefore, a 64 percent retardation of the building up of the number of producing oil wells, although total drilling was curtailed only by 33 percent and completions of productive oil wells under selective drilling by 43 percent.

The failure to maintain in 1942 the normal expansion of the number of producing oil wells occurred primarily because of the curtailment of drilling of new wells to replace depleted wells, and not so much because of premature abandonment, it was indicated. On the contrary, for the country as a whole, there was evidenced special effort to keep producing wells on production and to put idle wells back on production. During the year, fewer wells were abandoned than in 1941. There was an indicated loss of 7279 oil wells during 1942, considering 10,954 new oil wells completed and the net gain of only 3675 producing wells between the end of 1941 and the end of 1942. In 1941 there had been a corresponding permanent or temporary abandonment of 9406 oil wells, with 19,472 completed and a net gain of 10,066 in producing wells during the year. In California, particularly, there was in 1942, as in 1941, an indicated large-scale revival of idle wells, that state having had many wells long in idleness, and having encountered in 1942 exceptionally great demand for oil.

By reason of the drastic curtailment of production in the Southwestern states during part of 1942, when transportation to markets was disrupted, there was a decrease in average production per well in the United States to 9.3 barrels daily in 1942 from 9.7 barrels per day in 1941, although some states drew more heavily from wells in 1942 than in 1941.

Producing Oil Wells in United States and Average Production

Figures for 1940, 1941 and 1942 by The Oil Weekly, with cooperation of state conservation officials and others; earlier years by the Bureau of Mines.

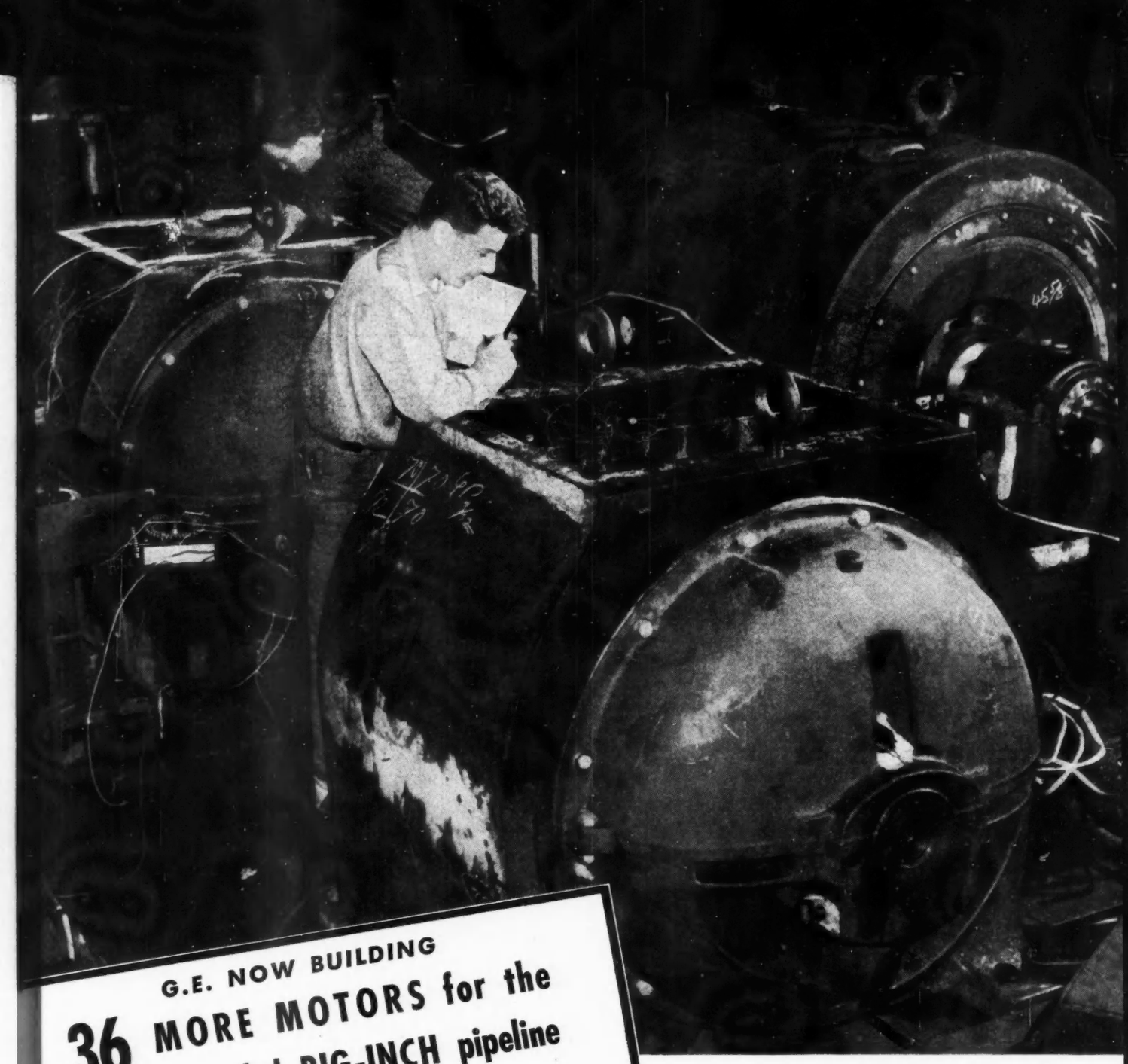
YEAR	Number of Wells at End of Year	*Bbls. Prod. Per Well Per Day
1921	274,500	4.9
1922	284,880	5.7
1923	290,100	6.6
1924	299,100	6.2
1925	306,100	6.5
1926	318,600	6.8
1927	323,300	7.7
1928	327,800	7.6
1929	328,200	8.4
1930	331,070	7.5
1931	315,850	7.2
1932	321,500	6.7
1933	326,850	7.7
1934	333,070	7.5
1935	340,990	8.1
1936	349,450	8.7
1937	363,030	9.8
1938	369,640	9.1
1939	380,390	9.2
1940	393,516	9.5
1941	403,582	9.7
1942	407,257	9.3

* Daily average production for year divided by average number of wells on production during year, that is, between January 1 and December 31.

Producing Oil Wells at New Peak at End of 1942, but Number Flowing Down Slightly

State or District	Flowing Oil Wells			Pumping or Agitated Wells			Total Producing Oil Wells			*Average Production per Well per Day During Year	
	End of 1941	End of 1942	Percent Change	End of 1941	End of 1942	Percent Change	End of 1941	End of 1942	Percent Change	1941	1942
Arkansas	275	327	+ 18.9	2,552	2,721	+ 6.6	2,827	3,048	+ 7.8	25.2	24.8
California	1,702	1,714	+ 0.7	15,293	17,080	+ 11.6	16,995	18,794	+ 10.5	39.0	37.9
San Joaquin Valley	747	818	+ 9.5	8,113	9,302	+ 14.6	8,860	10,120	+ 14.2	33.1	30.1
Coastal District	286	305	+ 6.6	1,303	1,476	+ 13.2	1,589	1,781	+ 12.0	58.1	55.2
Los Angeles Basin	669	591	— 11.6	5,877	6,302	+ 7.2	6,546	6,893	+ 5.3	44.6	44.7
Colorado	13	18	+ 38.4	212	148	— 30.1	225	166	— 26.2	23.7	31.5
Illinois	372	300	— 19.3	23,055	24,883	+ 7.9	23,427	25,183	+ 7.4	16.6	11.9
Indiana	10	.....	.....	1,875	1,931	+ 2.9	1,885	1,931	+ 2.4	10.3	9.6
Kansas	281	336	+ 19.5	21,503	22,024	+ 2.4	21,784	22,360	+ 2.6	10.4	12.1
Kentucky	.....	.....	.....	14,250	14,300	+ 0.3	14,250	14,300	+ 0.3	0.9	0.8
Louisiana	2,407	2,396	— 0.4	4,693	4,924	+ 4.9	7,100	7,320	+ 3.0	47.3	44.2
North Louisiana	350	552	+ 57.7	4,050	3,865	— 4.5	4,400	4,417	+ 0.3	16.5	18.4
South Louisiana	2,057	1,844	— 10.3	643	1,059	+ 64.6	2,700	2,903	+ 0.7	98.9	84.8
Michigan	150	235	+ 56.6	2,984	2,835	— 4.9	3,134	3,070	— 2.0	14.8	19.2
Mississippi	4	.....	.....	325	348	+ 7.0	329	348	+ 5.7	188.1	233.1
Missouri	.....	.....	.....	90	94	+ 4.4	90	94	+ 4.4	1.4	1.3
Montana	8	.....	.....	1,998	2,244	+ 12.3	2,006	2,244	+ 11.8	10.7	10.4
Nebraska	.....	.....	.....	70	88	+ 25.7	70	88	+ 25.7	71.1	43.9
New Mexico	2,773	2,821	+ 1.7	891	1,004	+ 12.6	3,664	3,825	+ 4.3	30.5	23.1
New York	.....	.....	.....	20,850	21,300	+ 2.1	2,850	21,300	+ 2.1	0.7	0.7
Ohio	.....	.....	.....	25,765	25,600	— 0.6	25,765	25,600	— 0.6	0.4	0.3
Oklahoma	100	400	+300.0	54,687	52,611	— 3.7	54,787	53,011	— 3.2	7.7	3.5
Pennsylvania	.....	.....	.....	83,800	84,800	+ 1.1	83,800	84,800	+ 1.1	0.6	0.5
Tennessee	.....	.....	.....	31	30	— 3.2	31	30	— 3.2	1.0	1.0
Texas†	39,625	38,619	— 2.5	59,177	60,281	+ 1.8	98,802	98,900	+ 0.1	14.5	13.0
Dist. 1 (South Cent. Tex.)	91	69	— 24.1	3,896	3,673	— 5.7	3,987	3,742	— 6.1	4.9	4.8
Dist. 2 (Lower Gulf Area)	1,975	2,130	+ 7.8	583	605	+ 3.7	2,558	2,735	+ 6.9	28.5	26.5
Dist. 3 (Upper Gulf Coast)	5,548	5,379	— 3.0	2,690	2,732	+ 1.5	8,238	8,111	— 1.5	30.4	30.6
Dist. 4 (Southwest Texas)	2,903	2,772	— 4.5	5,140	5,342	+ 3.9	8,043	8,114	+ 0.8	17.1	13.1
Dist. 5 (E. Central Texas)	347	351	+ 1.1	1,400	1,396	— 0.2	1,747	1,747	.....	10.9	10.3
Dist. 6 (East Texas Field)	17,612	16,905	— 4.0	8,152	8,435	+ 3.4	25,764	25,340	— 1.6	14.7	12.9
Dist. 6 (Outside E. Tex. Field)	836	875	+ 4.6	1,215	1,285	+ 5.7	2,051	2,160	+ 5.3	41.2	32.3
Dist. 7-B (West Central)	411	415	+ 0.9	6,529	6,465	— 0.9	6,940	6,880	— 0.8	3.8	0.3
Dist. 7-C (West Texas)	59	88	+ 49.1	1,186	1,186	.....	1,245	1,274	+ 2.3	14.5	13.5
Dist. 8 (West Texas)	7,724	7,709	— 0.1	5,325	6,090	+ 14.3	13,049	13,799	+ 5.7	19.5	15.3
Dist. 9 (North Texas)	2,050	1,889	— 7.8	17,755	17,609	— 0.8	19,805	19,498	— 1.5	5.5	5.7
Dist. 10 (Panhandle)	69	37	— 46.3	5,306	5,463	+ 2.9	5,375	5,500	+ 2.3	15.0	15.6
Utah	.....	.....	.....	19	5	— 73.6	19	5	— 73.6	0.5	0.8
West Virginia	.....	.....	.....	18,065	17,900	— 0.9	18,065	17,900	— 0.9	0.5	0.5
Wyoming	29	104	+258.0	3,648	2,836	— 22.2	3,677	2,940	— 20.0	22.6	26.1
United States Total	47,749	47,270	— 1.0	355,833	359,987	+ 1.1	403,582	407,257	+ 0.9	9.7	9.3

* Daily average production of area for year divided by average number of wells on production during year, that is, between January 1, and December 31.
† District numbers are those into which Texas is Divided by Texas Railroad Commission in administering proration. Figures given here are commission's figures for November and differ slightly from those on producing wells embodied in tables in this issue giving production and drilling data by individual fields, the latter being data for October.



Shown during test at the factory—the first two of 51 squirrel-cage motors (rated 1500 hp, 1800 rpm, 2300 volts) for use on the 24-inch War Emergency pipeline from Texas to the Pa.-N.J. refinery centers.

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Main control for ten stations, as well as transformers and auxiliary motors for a considerable number of stations, are also being supplied by General Electric for the pipeline from Texas to the Pennsylvania-New Jersey refinery centers.

War Disrupts Upward Rise in United States Crude Output

Nation's 1942 production 19 million barrels, 1.3 percent less than year ago as war interferes with transportation

DESPITE the war's interference with normal transportation of oils in this country, the wells of the United States produced in 1942 only 1.3 percent less crude oil than the all-time record quantity of 1941. Output totaled 1,385,347,000 barrels, compared with 1,404,182,000 in 1941.

Production statistics by states for all years shown on pages 82-83. Production statistics by fields for 1942 and cumulative begin on page 129.

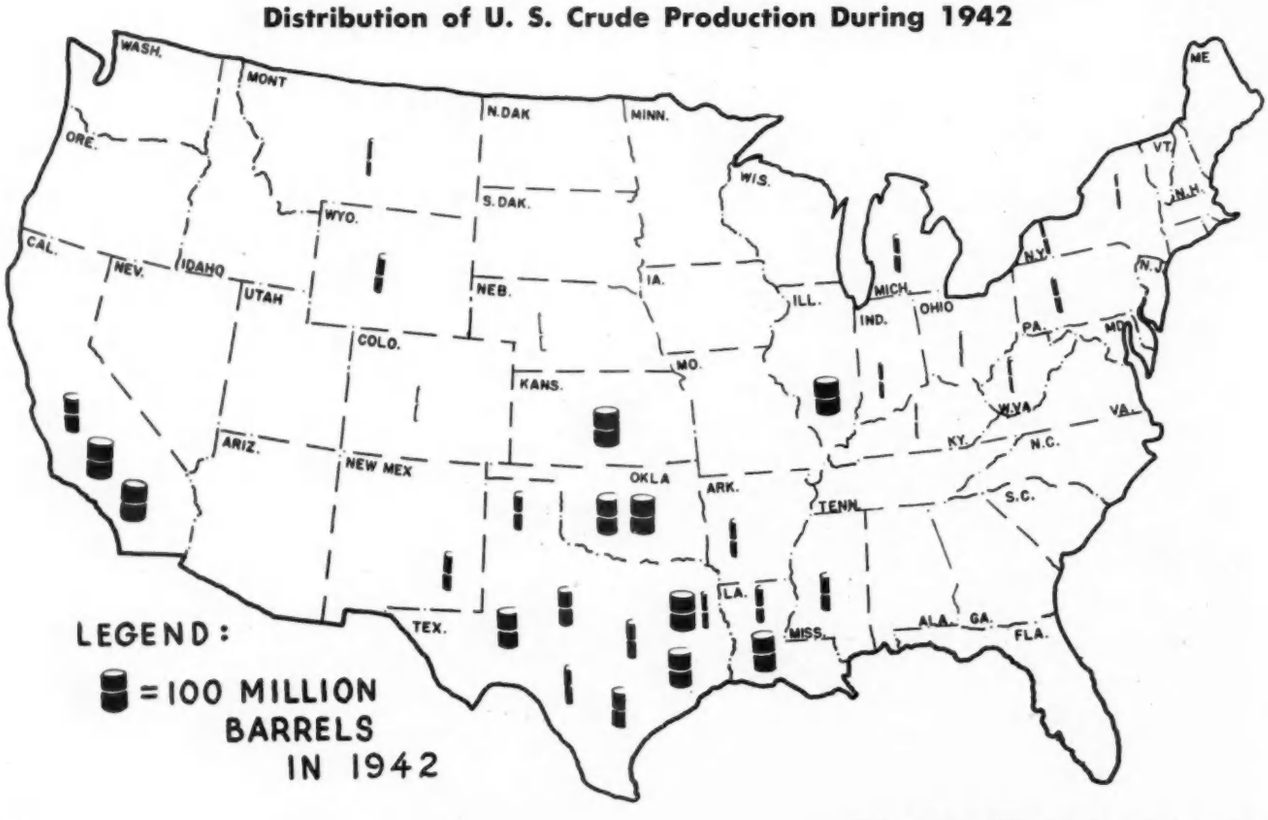
While the quantity of crude petroleum production in 1942 was 1.3 percent lower than that of 1941, the market value of the crude at the wells showed an increase of about 3 percent. On the basis of an indicated average value of approximately $1.17 per barrel, the 1,385,347,000 barrels of crude produced in 1942 was worth to the producers $1,620,856,000. In 1941 the average price had been about $1.12 a barrel, and for the 1,404,182,000 barrels produced during the year, the producers received at the wells about $1,572,684,000.

While United States production of crude was down only 19,000,000 barrels, or 1.3 percent, in 1942, compared with 1941, it could have shown an even smaller decrease without exceeding demand, as it was necessary to withdraw 13,000,000 barrels of crude oil from storage during 1942 in charging to stills the quantities of crude that were refined. Therefore, production could have been within a few millions of barrels or a fraction of 1 percent of the 1941 peak without exceeding demand. Furthermore, the demand itself might have been higher but for the fact that natural gasoline was used in increased volume.

United States Crude Oil Production, by States, 1941-1942
(Thousands of Barrels)

STATE	1941	1942	Percent Change '41-'42	Percent of U.S. in 1942
Arkansas	26,327	26,617	+ 1.1	1.9
California	230,263	248,098	+ 7.7	17.9
Colorado	1,875	2,246	+19.8	0.2
Illinois	134,138	106,178	—20.8	7.7
Indiana	6,634	6,744	+ 1.7	0.5
Kansas	83,261	97,845	+17.5	7.1
Kentucky	4,762	4,198	—11.8	0.3
Louisiana	115,908	116,392	+ 0.4	8.4
Michigan	16,361	21,761	+33.0	1.6
Mississippi	15,314	28,761	+87.8	2 1
Missouri	47	45	— 4.3	0.0
Montana	7,526	8,095	+ 7.6	0.6
Nebraska	1,636	1,267	—22.6	0.1
New Mexico	39,369	31,631	—19.7	2.3
New York	5,185	5,451	+ 5.1	0.4
Ohio	3,340	3,599	+ 7.8	0.3
Oklahoma	154,759	140,386	— 9.3	10.0
Pennsylvania	16,750	17,984	+ 7.4	1.3
Tennessee	12	12	.....	0.0
Texas	507,584	482,755	— 4.9	34.7
Utah	4	4	.....	0.0
West Virginia	3,433	3,663	+ 6.7	0.3
Wyoming	29,694	31,615	+ 6.5	2.3
Total U. S.	1,404,182	1,385,347	— 1.3	100.0

Distribution of U. S. Crude Production During 1942



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WISSCO PRODUCTS

United States Crude Oil Production, by States, by Years

(Complete production history of the nation, in thousands of barrels of 42 U. S. gallons. Sources—*Mineral Resources* and *Minerals Yearbook*, except where otherwise indicated in footnotes.)

YEAR	Arkansas	California	Colorado	Illinois	Indiana	Kansas	Kentucky	Louisiana	Michigan	Mississippi	Missouri	Montana	Nebraska	New Mexico
1859														
1860							[E]							
1861							[E]							
1862							[E]							
1863							[E]							
1864							[E]							
1865							[E]							
1866							[E]							
1867							[E]							
1868							[E]							
1869							[E]							
1870							[E]							
1871							[E]							
1872							[E]							
1873							[E]							
1874							[E]							
1875							[E]							
1876		12					[G E]							
1877		13					[G E]							
1878		15					[G E]							
1879		20					[G E]							
1880		40					[G E]							
1881		100					[G E]							
1882		129					[G E]							
1883		143					[G5]							
1884		262					[G4]							
1885		325					[G5]							
1886		377					[G5]							
1887		678	76				[G5]							
1888		690	298				[G5]							
1889		303	317	1	33	1	[G5]				[H]			
1890		307	369	1	64	1	[G6]				[H]			
1891		324	666	1	137	1	[G9]				[H]			
1892		385	824	1	698	5	[G7]				[H]			
1893		470	594	1	2,335	18	[G3]				[H]			
1894		706	516	[H]	3,689	40	[G2]				[H]			
1895		1,209	438	[H]	4,386	44	[G2]				[H]			
1896		1,253	361	[H]	4,681	114	[G2]				[H]			
1897		1,903	385	1	4,122	81	[G H]				[H]			
1898		2,257	444	[H]	3,731	72	[G6]				[H]			
1899		2,642	390	[H]	3,848	70	[G18]				[H]			
1900		4,325	317	[H]	4,874	75	[G62]		[J]		[J2]			
1901		8,787	461	[H]	5,757	179	[G137]		[J]		[J2]			
1902		13,984	397	[H]	7,481	332	[G185]	549	[J]		[J1]			
1903		24,382	484		9,186	932	[G554]	918	[J]		[J3]			
1904		29,649	501		11,339	4,251	[G998]	2,959	[J]		[J3]			
1905		33,428	376	181	10,964	[I]3,750	[G]1,217	8,910	[J]		[J3]			
1906		33,099	328	4,397	7,674	[I]3,627	[G]1,214	9,077	[J]		[J3]			
1907		39,748	332	24,282	5,128	2,410	[G]821	5,000	[J]		[J4]			
1908		44,855	380	33,686	3,283	1,801	728	5,789	[J]		[J]15			
1909		55,472	311	30,898	2,296	1,264	639	3,060	[J]		[J6]			
1910		73,011	240	33,143	2,160	1,128	469	6,841	[J]		[J4]			
1911		81,134	227	31,317	1,695	1,279	472	10,721	[J]		[J8]			
1912		87,269	206	28,602	970	1,593	484	9,263	[K]					
1913		97,788	189	23,894	956	2,375	525	12,499	[K]		[K]			[K]
1914		99,775	223	21,920	1,336	3,104	503	14,309	[K]		[K]			
1915		86,592	208	19,042	876	2,823	437	18,192	[K]		[K]			
1916		90,952	197	17,714	769	8,738	[L]1,202	15,248	[K]		[K]	45		
1917		93,878	121	15,777	760	36,536	[L]3,088	11,392	[K]			100		
1918		97,532	143	13,366	878	45,451	[L]4,368	16,043	[K]			69		
1919		101,183	121	11,960	972	33,048	9,278	17,188	[K]		[K]	90		[K]
1920	[K]	103,377	111	10,774	945	39,005	8,738	35,714			[K]	340		[K]
1921	10,473	112,600	108	10,043	1,158	36,456	9,013	27,103			[K]	1,509		[K]
1922	12,712	138,468	97	9,383	1,087	31,766	8,973	35,376			[K]	2,449		[K]
1923	36,610	262,876	86	8,707	1,043	28,250	8,069	24,919			[K]	2,782		[K]
1924	46,028	228,933	445	8,081	935	28,836	7,407	21,124				2,815		98
1925	77,398	232,492	1,226	7,863	829	38,357	6,759	20,272	4			4,091		1,060
1926	58,332	224,673	2,768	7,760	808	41,498	6,274	23,201	94			7,727		1,666
1927	40,005	231,196	2,831	6,994	852	41,069	6,719	22,818	439			5,058		1,226
1928	32,096	231,811	2,774	6,462	1,052	38,596	7,359	21,847	594			4,015		943
1929	24,917	292,534	2,358	6,319	981	42,813	7,775	20,554	4,528			3,980		1,830
1930	19,702	227,329	1,656	5,736	994	41,638	7,389	23,272	3,911			3,349		10,189
1931	14,791	188,830	1,545	5,039	840	37,018	6,456	21,804	3,789			2,830		15,227
1932	12,051	178,128	1,136	4,673	806	34,848	6,287	21,807	6,910		[K]	2,457		12,455
1933	11,686	172,010	919	4,244	737	41,976	4,608	25,168	7,942	[K]	[K]	2,273		14,116
1934	11,182	174,305	1,139	4,479	838	46,482	4,860	32,869	10,603	[K]	[K]	3,603		16,864
1935	11,008	207,832	1,560	4,322	777	54,843	5,258	50,330	15,776	[K]	[K]	4,603		20,483
1936	10,469	214,773	1,650	4,475	822	58,317	5,633	80,491	11,928		[K]	5,868		27,223
1937	11,764	238,521	1,605	7,499	844	70,761	5,484	90,924	16,628		[K]	5,805		38,854
1938	18,180	249,749	1,412	24,075	995	60,064	5,821	95,208	18,745		[K]	4,946		35,759
1939	21,238	224,354	1,404	94,912	1,711	60,703	5,621	93,646	23,462	107	40	5,960	2	37,637
1940	25,775	223,881	1,626	147,647	4,978	66,139	5,188	103,584	19,753	4,400	44	6,728	276	39,129
1941	26,327	230,263	1,875	134,138	6,634	83,261	4,762	115,908	16,361	15,314	47	7,526	1,636	39,369
1942[F]	26,617	248,098	2,246	106,178	6,744	97,845	4,198	116,392	21,761	28,761	45	8,095	1,267	31,631
Total	559,361	6,048,439	44,017	939,988	144,488	1,275,684	176,121	1,292,289	183,228	48,582	230	99,113	3,181	345,759

[A] Utah production estimated at 3,650 barrels in 1939; 3,126 barrels in 1940; and 189,726 barrels cumulative through 1940.

[B] *Petroleum in the United States and Possessions*, by Arnold and Kemnitzer, shows for Alaska the following data: 1904-1919, estimated, 56,000 barrels; 1920, 11,000 barrels; 1921, 10,000 barrels; 1922-1928, estimated, 73,000 barrels; total, 1904-1928, 150,000 barrels.

[C] "Unclassified" includes 1912, Alaska and Michigan; 1913, Alaska, Michigan, Missouri and New Mexico; 1914-16, Alaska, Michigan and Missouri; 1917-18, Alaska and Michigan; 1919, Alaska, Michigan, Missouri and New Mexico; 1920, Alaska, Arkansas, Missouri, New Mexico and Utah; 1921-23, Alaska, Missouri and New Mexico; 1924-31, Alaska and Utah; 1932, Alaska, Missouri and Utah; 1933, Alaska, Mississippi, Missouri and Utah; 1934, Mississippi, Missouri and Utah; 1935, Mississippi, Missouri, Tennessee and Utah; 1936-40, Missouri, Tennessee and Utah.

[D] Pennsylvania and New York separated in years 1864-1881, by aid of *Petroleum in the United States and Possessions*, by Arnold and Kemnitzer.

[E] *Petroleum in the United States and Possessions*, by Arnold and Kemnitzer, gives the following additional estimates which are not shown by the official *Mineral Resources:* Ohio, 1860-1875, 200,000 barrels; West Virginia, 1860-1875, 2,800,000 barrels; Kentucky, 1860-1882, 161,000 barrels.

United States Crude Oil Production, by States, by Years—(Continued)

(Complete production history of the nation, in thousands of barrels of 42 U. S. gallons. Sources—*Mineral Resources* and *Minerals Yearbook*, except where otherwise indicated in footnotes.)

New York	Ohio	Oklahoma	Pennsylvania	Tennessee	Texas	[A] Utah	West Virginia	Wyoming	[B] Alaska	[C] Unclassified	Total United States	Total Value At Wells (Thousands of Dollars)	[O] Average Value Per Bbl.	YEAR
.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	$ 32	$20.00	1859
.....	E	.....	500	.....	.....	.....	E	.....	.....	.....	500	4,800	9.60	1860
.....	E	.....	2,114	.....	.....	.....	E	.....	.....	.....	2,114	1,036	.52	1861
.....	E	.....	3,057	.....	.....	.....	E	.....	.....	.....	3,057	3,210	1.05	1862
.....	E	.....	2,611	.....	.....	.....	E	.....	.....	.....	2,611	8,226	3.15	1863
[D F H]	E	.....	[D F] 2,116	.....	.....	.....	E	.....	.....	.....	2,116	20,897	8.15	1864
[D]100	E	.....	[D]2,398	.....	.....	.....	E	.....	.....	.....	2,498	16,460	6.59	1865
[D]144	E	.....	[D]3,454	.....	.....	.....	E	.....	.....	.....	3,598	13,455	3.75	1866
[D]134	E	.....	[D]3,213	.....	.....	.....	E	.....	.....	.....	3,347	8,067	2.40	1867
[D]146	E	.....	[D]3,500	.....	.....	.....	E	.....	.....	.....	3,646	13,217	3.62	1868
[D]169	E	.....	[D]4,046	.....	.....	.....	E	.....	.....	.....	4,215	23,730	5.60	1869
[D]211	E	.....	[D]5,050	.....	.....	.....	E	.....	.....	.....	5,261	20,504	3.90	1870
[D]208	E	.....	[D]4,997	.....	.....	.....	E	.....	.....	.....	5,205	22,591	4.40	1871
[D]252	E	.....	[D]6,041	.....	.....	.....	E	.....	.....	.....	6,293	21,440	3.75	1872
[D]396	E	.....	[D]9,498	.....	.....	.....	E	.....	.....	.....	9,894	18,100	1.80	1873
[D]437	E	.....	[D]10,490	.....	.....	.....	E	.....	.....	.....	10,927	12,648	1.15	1874
[D]352	E	.....	[D]8,436	.....	.....	.....	E	.....	.....	.....	8,788	7,368	.97	1875
[D]359	32	.....	[D]8,610	[G]	.....	.....	120	.....	.....	.....	9,133	22,983	2.52	1876
[D]525	30	.....	[D]12,610	[G]	.....	.....	172	.....	.....	.....	13,350	31,789	2.38	1877
[D]607	38	.....	[D]14,557	[G]	.....	.....	180	.....	.....	.....	15,397	18,045	1.17	1878
[D]787	29	.....	[D]18,898	[G]	.....	.....	180	.....	.....	.....	19,914	17,211	.86	1879
[D]1,041	39	.....	[D]24,987	[G]	.....	.....	179	.....	.....	.....	26,286	24,601	.94	1880
[D]1,095	34	.....	[D]26,281	[G]	.....	.....	151	.....	.....	.....	27,661	25,448	.92	1881
6,685	40	.....	23,368	[G]	.....	.....	128	.....	.....	.....	30,350	23,631	.78	1882
4,004	47	.....	19,125	[G]	.....	.....	126	.....	.....	.....	23,450	25,790	1.10	1883
3,231	90	.....	20,541	[G]	.....	.....	90	.....	.....	.....	24,218	20,596	.85	1884
2,658	662	.....	18,118	[G]	.....	.....	91	.....	.....	.....	21,859	19,198	.88	1885
2,151	1,783	.....	23,647	[G]	.....	.....	102	.....	.....	.....	28,065	19,996	.71	1886
2,075	5,023	.....	20,281	[G]	.....	.....	145	.....	.....	.....	28,283	18,877	.67	1887
1,789	10,011	.....	14,700	[G]	.....	.....	119	.....	.....	.....	27,612	17,948	.65	1888
1,897	12,472	.....	19,591	[G]	[H]	.....	544	.....	.....	.....	35,164	26,963	.77	1889
1,658	16,125	.....	26,800	[G]	[H]	.....	493	.....	.....	.....	45,824	35,365	.77	1890
1,585	17,740	[H]	31,424	[G]	[H]	.....	2,406	.....	.....	.....	54,293	30,527	.56	1891
1,273	16,363	[H]	27,149	[G]	[H]	.....	3,810	.....	.....	.....	50,515	25,907	.51	1892
1,032	16,249	[H]	19,283	[G]	[H]	.....	8,446	.....	.....	.....	48,431	28,950	.60	1893
942	16,792	[H]	18,078	[G]	[H]	.....	8,577	2	.....	.....	49,344	35,522	.72	1894
913	19,545	[H]	18,231	[G]	[H]	.....	8,120	4	.....	.....	52,892	57,632	1 09	1895
1,205	23,941	[H]	19,379	[G]	1	.....	10,020	3	.....	.....	60,960	58,519	.96	1896
1,279	21,561	1	17,983	[G]	66	.....	13,090	4	.....	.....	60,476	40,874	.68	1897
1,205	18,739	.....	14,743	[G]	546	.....	13,615	6	.....	.....	55,364	44,193	.80	1898
1,321	21,142	.....	13,054	[G]	669	.....	13,911	6	.....	.....	57,071	64,604	1.13	1899
1,301	22,363	6	13,258	[G]	836	.....	16,196	6	.....	.....	63,621	75,989	1.19	1900
1,207	21,648	10	12,625	[G]	4,394	.....	14,177	5	.....	.....	69,389	66,417	.96	1901
1,120	21,014	37	12,064	[G]	18,084	.....	13,513	6	.....	.....	88,767	71,179	.80	1902
1,163	20,480	139	11,355	[G]	17,956	.....	12,900	9	.....	.....	100,461	94,694	.94	1903
1,113	18,877	1,367	11,126	[G]	22,241	.....	12,645	12	[N]	.....	117,081	101,175	.86	1904
1,118	16,347	[I]8,264	10,437	[G]	28,136	.....	11,578	8	.....	.....	134,717	84,157	.62	1905
1,243	14,788	[I]18,091	10,257	[G]	12,568	.....	10,121	7	.....	.....	126,494	92,445	.73	1906
1,212	12,207	43,524	10,000	[G]	12,323	[M]	9,095	[M]9	[N]	.....	166,095	120,107	.72	1907
1,160	10,859	45,799	9,424	.....	11,207	[M]	9,523	[M]18	.....	.....	178,527	129,079	.72	1908
1,135	10,633	47,859	9,299	.....	9,534	[M]	10,745	[M]20	.....	.....	183,171	128,329	.70	1909
1,054	9,916	52,029	8,795	.....	8,899	[M]	11,753	[M]115	.....	.....	209,557	127,900	.61	1910
953	8,817	56,069	8,248	.....	9,526	[M]	9,796	[M]187	[N]	.....	220,449	134,045	.61	1911
874	8,969	51,427	7,838	.....	11,735	[M]	12,129	[M]1,572	[K]	4	222,935	164,213	.74	1912
948	8,781	63,579	7,917	.....	15,010	[N]	11,567	2,407	[K]	11	248,446	237,121	95	1913
939	8,536	73,632	8,170	.....	20,068	[N]	9,680	3,560	[K]	8	265,763	214,125	.81	1914
888	7,825	97,915	7,838	.....	24,943	[N]	9,265	4,246	[K]	14	281,104	179,463	.64	1915
874	7,744	107,072	7,593	[L]1	27,645	[N]	8,731	6,234	[K]	8	300,767	330,900	1.10	1916
880	7,751	107,508	7,733	[L]12	32,413	[N]	8,379	8,978	[K]	10	335,316	522,635	1.56	1917
809	7,285	103,347	7,408	[L]8	38,750	[N]	7,867	12,596	[K]	8	355,928	703,944	1.98	1918
851	7,736	86,911	8,137	15	79,366	[N]	8,327	13,172	[K]	12	378,367	760,266	2.01	1919
906	7,400	106,206	7,438	14	96,868	[K]	8,249	16,831	[K]	13	442,929	1,360,745	3.07	1920
988	7,335	114,634	7,418	12	106,166	.....	7,822	19,333	[K]	12	472,183	814,745	1.73	1921
1,000	6,781	149,571	7,425	10	118,684	.....	7,021	26,715	[K]	13	557,531	895,111	1.61	1922
1,250	7,085	160,929	7,609	8	131,023	.....	6,358	44,785	[K]	18	732,407	978,430	1.34	1923
1,440	6,811	173,538	7,486	10	134,522	[K]	5,920	39,498	[K]	13	713,940	1,022,683	1.43	1924
1,695	7,212	176,768	8,097	24	144,648	[K]	5,763	29,173	[K]	12	763,743	1,284,960	1.68	1925
1,956	7,272	179,195	8,961	43	166,916	[K]	5,946	25,776	[K]	8	770,874	1,447,760	1.88	1926
2,242	7,593	277,775	9,526	60	217,389	[K]	6,023	21,307	[K]	7	901,129	1,172,830	1.30	1927
2,603	7,015	249,857	9,956	46	257,320	[K]	5,661	21,461	[K]	6	901,474	1,054,880	1.17	1928
3,377	6,743	255,004	11,820	19	296,876	[K]	5,574	19,314	[K]	7	1,007,323	1,280,417	1.27	1929
3,647	6,486	216,486	12,803	21	290,457	[K]	5,071	17,868	[K]	7	898,011	1,070,200	1.19	1930
3,363	5,327	180,574	11,892	6	332,437	[K]	4,472	14,834	[K]	7	851,081	550,630	65	1931
3,508	4,644	153,244	12,412	5	312,478	[K]	3,876	13,418	[K]	16	785,159	680,460	.87	1932
3,181	4,235	182,251	12,624	5	402,609	[K]	3,815	11,227	[K]	30	905,656	608,000	.67	1933
3,804	4,234	180,107	14,478	10	381,516	[K]	4,095	12,556	.....	41	908,065	904,825	1.00	1934
4,236	4,082	185,288	15,810	[K]	392,666	[K]	3,902	13,755	.....	65	996,596	961,440	.96	1935
4,663	3,847	206,555	17,070	[K]	427,411	[K]	3,847	14,582	.....	63	1,099,687	1,199,820	1.09	1936
5,478	3,559	228,839	19,189	[K]	510,318	[K]	3,845	19,166	.....	77	1,279,160	1,513,340	1.18	1937
5,045	3,298	174,994	17,426	[K]	475,850	[K]	3,684	19,022	.....	82	1,214,355	1,373,060	1.13	1938
5,098	3,156	159,913	17,382	50	483,528	4	3,580	21,454	.....	.....	1,264,962	1,294,470	1.02	1939
4,999	3,159	156,164	17,353	24	493,209	3	3,444	25,711	.....	.....	1,353,214	1,385,440	1.02	1940
5,185	3,340	154,759	16,750	12	507,584	4	3,433	29,694	.....	.....	1,404,182	1,572,684	1.12	1941
5,451	3,599	140,386	17,984	12	482,755	4	3,663	31,615	.....	.....	1,385,347	1,620,856	1.17	....[P]1942
139,823	595,316	5,127,623	1,021,392	427	7,570,146	15	417,866	562,287	.....	572	26,595,947	31,336,919	$1.18	....Total

[F] New York included with Pennsylvania.
[G] Tennessee included with Kentucky, 1876-1907, inclusive.
[H] Less than 500 barrels.
[I] Figures for Oklahoma and Kansas for years 1905-1906 shown together by *Mineral Resources;* here divided by aid of *Petroleum in the United States and Possessions,* by Arnold and Kemnitzer.
[J] Michigan shown with Missouri in 1900-1911.
[K] Included under "Unclassified."
[L] Kentucky and Tennessee figures in years 1916-18 obtained with aid of *Mineral Resources* and *Petroleum in the United States and Possessions,* by Arnold and Kemnitzer.
[M] Insignificant production of Utah (mostly used as fuel) shown with Wyoming.
[N] Little production but no record available.
[O] Figures on average price per barrel for years 1859-1875 taken from *Petroleum in the United States and Possessions,* by Arnold and Kemnitzer; remainder from *Mineral Resources* and *Minerals Yearbook.*
[P] Bureau of Mines figures for first 10 months; November and December estimated by The Oil Weekly, with aid of weekly reports of American Petroleum Institute and other sources.

Deeper Producing and Drilling Records for Several Districts

World depth records unchanged, but deeper drilling and producing levels reached in several regions . . . Three Texas areas receive their first 10,000-foot production

ALTHOUGH world production- and drilling-depth records have remained unchanged since 1938, both records were established during 1942 in several districts of the United States.

New production-depth records were more numerous than deeper-drilling records, Noteworthy among the new district producing-depth records was the entry of West Texas, East Texas and Southwest Texas into the list of areas having production from 10,000 feet. The new record in West Texas is 10,364 feet. A year ago West Texas' deepest production was from 9163 feet. East Texas, which had its deepest production at 8317 feet a year ago, now has production from 10,212 feet. Southwest Texas increased its record for producing depth from 9927 feet to 10,168 feet. The producing depth record of the Texas Gulf Coast went to 11,815 feet from 11,427 feet, that of North Texas from 6425 feet to 7444 feet, and that of West Central Texas to 4555 feet.

United States Producing Depth Records By States

STATE	Feet	Year	Formation	Well and Location
Louisiana:				
South	*13266	1938	Miocene	Fohs Oil's Buckley-Bourg 1, DeLarge field, Terrebonne Parish.
South	10546	1942	Smackover	Union Producing's Meadows B-1, North Lisbon field, Claiborne Parish.
California	13171	1938	Miocene	Continental Oil's KCL A-2, Wasco field, Kern County.
Texas:				
Gulf Coast	11815	1942	Wilcox	Superior Oil's South Texas Development 1, Lake Creek field, Montgomery County.
West Texas	10364	1942	Elleburger	Shell Oil's Sealy-Smith 1, Monahans field, Ward County.
East Texas	10212	1942	Pettit	Humble Oil & Refining's Curtis 1, Larissa field, Cherokee County.
Southwest	10168	1942	Wilcox	Shell Oil's Plow Realty 5, Sheridan field, Colorado County.
East Border	8717	1941	Cotton Valley	Carthage Gas Field, Panola County.
North Texas	7444	1942	Marble Falls	Magnolia Petroleum's Medley 1, Forestburg field, Montague County.
West Central	4555	1942	Ellenburger	Fleming Oil et al's Corbett 4, Corbett field, Stephens County.
Panhandle	3830	1929	Permian	Canadian River Gas Bivens 9-A, gas well, Hartley County.
Oklahoma	9992	1935	Pennsylvanian	Denver Producing & Refining's A-Dah-Noe 1, Binger pool, Caddo County.
Arkansas	9330	1942		Tide Water-Seaboard's Bendow 1, Potton field, Lafayette County.
Wyoming	8469	1936	Frontier	Resolute Oil's State 1, Badger Basin field, Park County.
Montana	8186	1935	Devonian	Montana-Dakota Utilities Co.'s Unit 1, Baker-Glendive field, Fallon County.
New Mexico	6950	1942	Lower Magdalena	U. S. Bureau of Mines-Continental's Navajo 1, 13-29n-19w, helium gas, San Juan County.
Kansas	6538	1937	Viola Lime	Olson Drilling's Morrison B, Morrison field, Clark County.
Colorado	6407	1938	Morrison	California-Texas Co.'s Unit 1, Wilson Creek field, Rio Blanco County
West Virginia	6347	1940	Clinton Sand	Columbian Carbon's Campbell Creek Coal 4, Loudon district, Kanawha County, gas well.
Illinois	4705	1941	Trenton	Texas Co.'s McCollum 21, Salem field, Marion County.
Indiana	2900	1938	McClosky	Griffin field, Posey County.
Mississippi	6222	1940	Tuscaloosa	Union Producing's Powell 1, Tinsley field, Yazoo County.

* World's record.

North Louisiana boosted its deepest production level to 10,546 feet in contrast with 10,395 feet a year ago. South Louisiana's 13,266-foot production remains the deepest in the world, although established in 1938.

A helium-gas well jumped New Mexico's deepest production from 6771 feet to 6950 feet.

Most significant to changes in district drilling-depth records was the entry of North Louisiana into the 12,000-foot class, the addition of Mississippi to those that have been tested to 11,000 feet, and the first 10,000-foot test for Arkansas. Currently, North Louisiana's deepest is a 12,952-foot test, which compares with 11,834 feet a year ago. Mississippi, which in 1941 had a 10,808-foot test, now has had an 11,902-foot operation. Arkansas increased its deepest oil hole from 9550 to 10,477 feet.

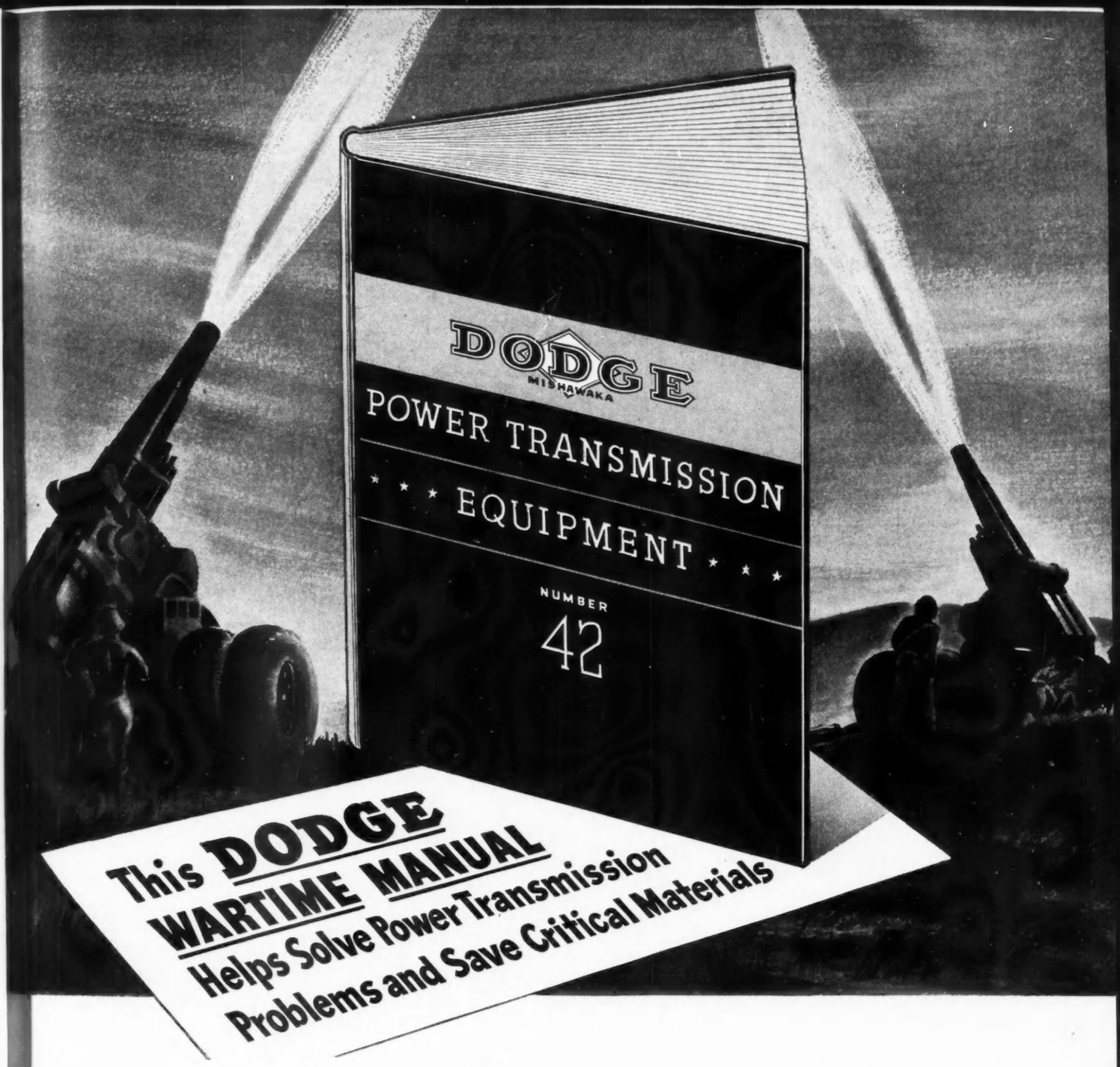
New Mexico was the only other district to establish a new drilling-depth record. At the end of the year a test was drilling at 8014 feet. A year ago the state had not been tested beyond 7957 feet.

The deepest test ever drilled in the world is one in the Wasco field of California. It reached 15,004 feet in 1938, then plugged back to become a producing well at 13,175 feet.

United States Drilling Depth Records By States

STATE	Feet	Year	Formation	Well and Location
California	*15004	1938	Miocene	Continental Oil's KCL A-2, Wasco field, Kern County.
Oklahoma	14582	1939	Pennsylvanian	Continentl Oil's Proctor 1, 2810-n-20w, Washita County.
Texas:				
Southwest	13728	1939	Yegua	Union Producing's Brown 1, Agua Dulce field, Nueces County.
Gulf Coast	13330	1941	Wilcox	Superior Oil's McWhorter 1-B, Lake Creek field, Montgomery County.
West Texas	12786	1935	Ellenburger	Gulf Oil's McElroy 103, Gulf-McElroy field, Upton County.
East Border	11303	1939	Salt	Texas Co.'s Adams 1-A, Cox Survey, Panola County.
East Texas	10900	1941	Pettit	Shell Oil's Dorsey 1, Percilla field, Houston County.
North Texas	9025	1941	Ellenburger	Amon G. Carter's Allen 1, Stephen Westbrook Survey A-1337, Denton County.
Panhandle	8013	1934	Ellenburger	Phillips Petroleum's Wilson 2, Sunray district, Moore County.
West Central	6505	1941	Ellenburger	Plymouth Oil & Davis' Cousins 1, John Echols Survey A-124, Somervell County.
Louisiana:				
South	13610	1940	Miocene	Superior Oil's State 3, Calcasieu Lake field, Cameron Parish.
North	12952	1942	Smackover	Union Producing's McDonald Unit 1, North Lisbon field, Claiborne Parish.
Alabama	12399	1941	Inrassie	Union Producing's Waite 1, 27-8n-1e, Clarke County.
Mississippi	11902	1942	Upper Glenrose	Amerada Petroleum's Central 1, 10-7n-3e, Franklin County.
Colorado	10815	1939	Mancos shale	Amerada Petroleum & California Co.'s Miller 1, 36-8s-91w, Divide Creek, Mesa County.
Arkansas	10477	1942	Smackover	McAlester Fuel's Jeffus 1, 4-19-24, Lafayette County.
Michigan	10447	1941	St. Peters	Gulf Refining's Bateson 1, 2-14n-4e, Bay County.
North Dakota	10281	1938		California Co.'s Kamp 1, 3-154n-96w, Nesson Anticline, Williams County.
Wyoming	10121	1940		California Co.'s Unit 1, Pinedale field, Sublette County.
West Virginia	10018	1941	Queenston Shale	Hope Natural Gas' Gribble 8517, Grant district, Harrison County.
Florida	10006	1939	Lower Cretaceous	Penninsular Oil & Refining's Cory 1, 6-55s-34e, Monroe County.
Montana	9678	1941	Schist	Carter Oil's Northern Pacific 1, Boker-Glendive, Fallon County.
Pennsylvania	8498	1941	Oriskany	Wm. E. Snee & New Pennsylvania Development's Neel 1, Stewart Township, Fayette County.
New Mexico	†8014	1942		Olsen Oil & Atlantic Refining's Langlie 1, 11-25s-37e, Lea County.
South Dakota	7800	1939		California Co.'s test at Camp Crook.
Illinois	7207	1940	St. Peters	Pure Oil's Bullington 3, Cisne field, Wayne County.
Kansas	7136	1938		Olson Drilling and Watchorn Oil & Gas' Watkins 1, Morrison field, Clark County.
Indiana	5026	1938	Devonian	Carter Oil's Casper Graulich 1, 4-7s-14w, Posey County.

* World's record. † Still drilling end of year.



This DODGE WARTIME MANUAL Helps Solve Power Transmission Problems and Save Critical Materials

THIS Dodge Wartime Manual of Mechanical Power Transmission has been compiled to assist in solving wartime power problems — to conserve power, increase production and save critical materials.

It is being released at a time when conservation of motors, power and critical materials is of vital importance. It is the "How Book" of the Dodge program aimed at helping industry to increase production — built around the fighting slogan — *"put all your power in the job."*

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THE RIGHT DRIVE FOR EVERY JOB

PUT *ALL* YOUR POWER IN THE JOB

Drilling Curb Hits Rotary Rigs Harder Than Cable Tools

PRIMARILY in reflection of the fact that restrictions on drilling more severely affected development in fields of the Southwest, Middle West and California than work in the Appalachian region, there was a sub-normal proportion of rotary rigs in operation in the United States on January 1, 1943 (53 percent of the total), and a greater than normal ratio of cable-tool operations (47 percent).

The Appalachian states of Pennsylvania, New York, and West Virginia have cable-tool drilling almost exclusively, and those states have continued to furnish a normal or near-normal volume of drilling. Similarly, New Mexico drilling has held up exceptionally well, and that state employs cable tools predominantly.

On the other hand, relatively high proportions of rigs in use in California, Arkansas, Louisiana, Texas, Oklahoma, Kansas, and Illinois are rotaries; and it has been in those states that rigs have been stacked in great numbers, with the nation's drilling curtailed nearly 40 percent.

Another important factor in causing an increase in the proportion of cable tool operations in 1942 was the shortage of drilling equipment and the necessity of putting back into service much obsolete cable tool equipment which had been stacked in past years but which was usable in the emergency. This was particularly true in Oklahoma and some other states and districts where rigs have been used to satisfy wide variety of drilling requirements.

Only to a limited extent has the national switch to a larger ratio of cable tools to rotaries been the result of such a change within given areas. States having more cable tool drilling currently than a year ago include: Illinois, Michigan, Montana, Nebraska, New Mexico, Oklahoma and Texas.

States and districts which currently have larger percentages of rotary drilling than they did a year ago include Colorado, Indiana, Kansas, Kentucky, North Texas, South Central Texas, and Wyoming.

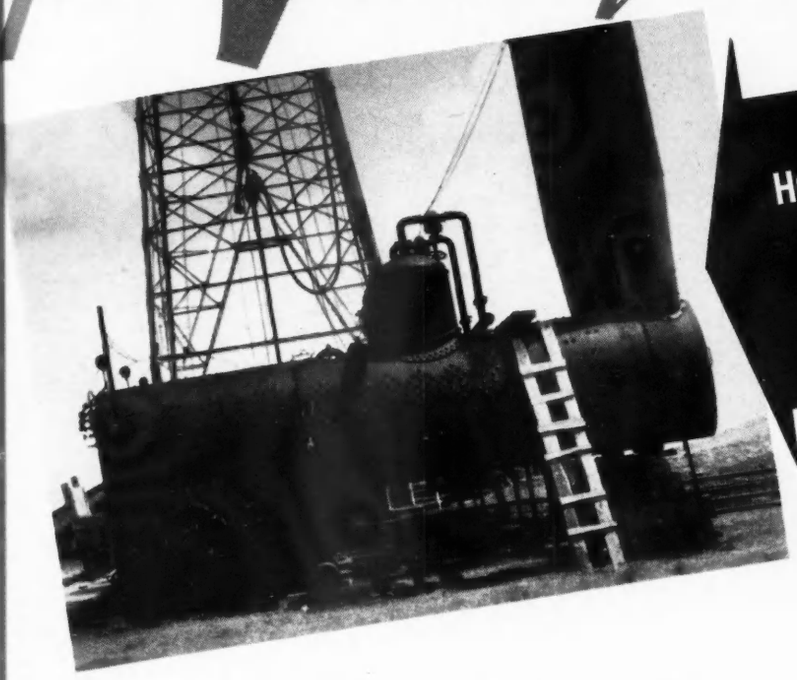
Rotary and Cable Tool Drilling Operations in the United States, January 1, 1943

Table also embodies comparisons with operations January 1, 1942

STATE	DRILLING			RIGS UP			SHUT DOWN			ALL RIGS IN USE (DRILLING, RIGS UP, AND SHUT DOWN)					
											ROTARY			CABLE TOOL		
	Rotary	Cable Tool	Total	Rotary	Cable Tool	Total	Rotary	Cable Tool	Total	TOTAL (Rotary and Cable Tool)	Number	Percent of Total	Percent of all Active Rigs Accounted for by Rotary Outfits 1 Year Ago (January 1, 1942)	Number	Percent of Total	Percent of all Active Rigs Accounted for by Cable Tool Outfits 1 Year Ago (January 1, 1942)
Alabama	....	....	....	....	....	....	....	....	....	....	....	....	66.7	....	....	33.3
Arizona	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Arkansas	20	2	22	....	....	....	1	....	1	23	21	91.3	96.7	2	8.7	3.3
California	117	8	125	37	3	40	38	2	40	235	192	93.7	96.0	13	6.3	4.0
Colorado	3	3	6	....	....	....	3	18	21	27	6	22.2	17.4	21	77.8	82.6
Florida	2	....	2	....	....	....	1	....	1	3	3	100.0	100.0	....	....	....
Georgia	1	....	1	....	....	....	....	....	....	1	1	100.0	100.0	....	....	....
Illinois	159	26	185	26	4	30	31	11	42	257	216	84.0	88.9	41	16.0	11.1
Indiana	21	22	43	2	3	5	3	2	5	53	26	49.1	32.9	27	50.9	67.1
Iowa	....	1	1	....	....	....	....	1	1	2	....	....	....	2	100.0	....
Kansas	115	31	146	14	4	18	7	6	13	177	136	76.8	70.2	41	23.2	29.8
Kentucky	15	34	49	3	2	5	....	....	....	54	18	33.3	5.2	36	66.7	94.8
Louisiana	88	....	88	9	....	9	14	....	14	111	111	100.0	100.0	....	....	....
North Louisiana	26	....	26	3	....	3	9	....	9	38	38	100.0	100.0	....	....	....
South Louisiana	62	....	62	6	....	6	5	....	5	73	73	100.0	100.0	....	....	....
Michigan	9	44	53	1	6	7	1	34	35	95	11	11.6	17.0	84	88.4	83.0
Mississippi	12	....	12	1	....	1	....	....	....	13	13	100.0	100.0	....	....	....
Missouri	1	1	2	....	1	1	....	6	6	9	1	11.1	12.5	8	88.9	87.5
Montana	2	20	22	2	6	8	4	26	30	60	8	13.3	42.2	52	86.7	57.8
Nebraska	10	3	13	....	1	1	3	5	8	22	13	59.1	68.2	9	40.9	31.8
New Mexico	8	32*	40	1	2*	3	1	22*	23	66	10	15.2	24.2	56	84.8	75.8
New York	....	64	64	....	25	25	....	41	41	130	....	....	....	130	100.0	100.0
North Dakota	....	....	....	....	....	....	1	1	2	2	1	50.0	....	1	50.0	....
Ohio	....	186	186	....	16	16	....	42	42	244	....	....	....	244	100.0	100.0
Oklahoma	151	37	188	18	7	25	10	8	18	231	179	77.5	84.8	52	22.5	15.2
Oregon	....	....	....	....	....	....	....	1	1	1	....	....	....	1	100.0	....
Pennsylvania	....	201	201	....	25	25	....	61	61	287	....	....	....	287	100.0	100.0
South Dakota	1	1	2	....	....	....	1	1	2	4	2	50.0	100.0	2	50.0	....
Tennessee	....	1	1	....	1	1	....	1	1	3	....	....	....	3	100.0	100.0
Texas	373	85	458	45	9	54	67	28	95	607	485	79.9	82.2	122	20.1	17.8
E. Tex. Border Co.'s	9	....	9	....	....	....	....	....	....	9	9	100.0	100.0	....	....	....
East Texas Field	....	....	....	....	....	....	....	....	....	....	....	....	100.0	....	....	....
Rest of East Texas	16	....	16	3	....	3	8	....	8	27	27	100.0	96.0	....	....	4.0
North Texas	69	8*	77	4	3*	7	16	4*	20	104	89	85.6	81.7	15	14.4	18.3
West Central Texas	11	35*	46	....	2*	2	2	11*	13	61	13	21.3	25.0	48	78.7	75.0
West Texas	107	39*	146	21	2*	23	22	13*	35	204	150	73.5	73.0	54	26.5	27.0
Texas Panhandle	36†	2	38	6†	1	7	2†	....	2	47	44	93.6	84.0	3	6.4	16.0
Gulf Coast, Upper	40	....	40	3	....	3	6	....	6	49	49	100.0	100.0	....	....	....
Gulf Coast, Lower	56	....	56	4	....	4	6	....	6	66	66	100.0	100.0	....	....	....
Southwest Texas	20	....	20	3	....	3	4	....	4	27	27	100.0	100.0	....	....	....
South Central Texas	9	1	10	1	1	2	1	....	1	13	11	84.6	69.5	2	15.4	30.5
Utah	1	1	2	....	....	....	....	3	3	5	1	20.0	....	4	80.0	100.0
West Virginia	1	36	37	....	6	6	....	9	9	52	1	2.0	....	51	98.0	100.0
Wyoming	17	10	27	3	....	3	7	16	23	53	27	51.0	47.0	26	49.0	53.0
Total United States	1127	849	1976	162	121	283	193	345	538	2797	1482	53.0	57.1	1315	47.0	42.9

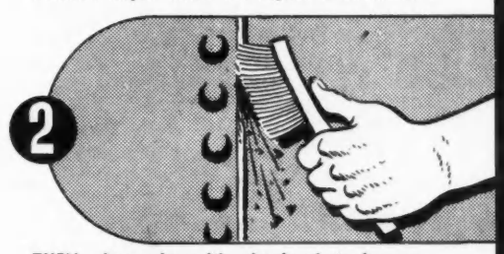
* Cable tool data include spudders and machines. † Combination rotary and cable tool. General practice is to spud with machine, then use rotary to top of oil pay, else stop in upper gas, say 2500-2800 foot level, or 500 to 300 feet above completion depth, then use cable tools to finish out the hole.

For Victory - FULL STEAM AHEAD

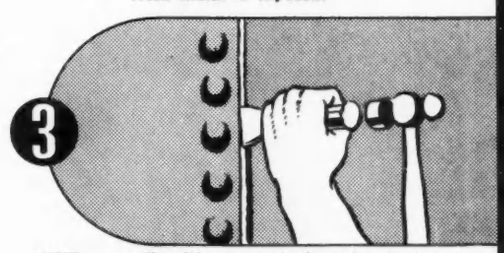


HOW TO ADD YEARS TO BOILER LIFE BY RE-CAULKING

FIRST, chip off fatigued caulking edge to the minimum depth which will expose fresh metal.



THEN, clean edge with wire brush to be sure fresh metal is exposed.



NEXT, re-caulk with proper tools, using tools lightly to keep from lifting seams.

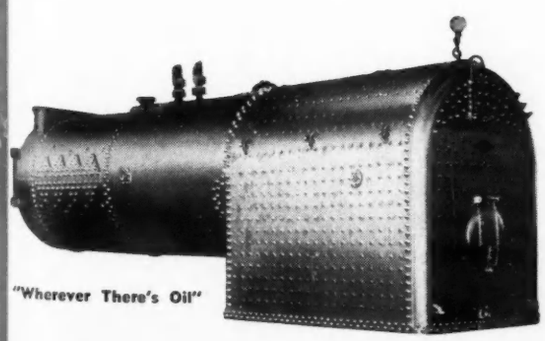
Today maintenance is a major problem with boiler operators everywhere. Boilers must now be operated to do the most for the War Effort. At the same time, everything must be done to increase boiler life and efficiency. Fortunately, Lucey Oil Country Boilers have always been built for years and years of service. However, when caulking edges become fatigued and leaks develop, it is both possible and practical to re-caulk.

USE THE PROPER TOOLS — WISELY

However, only proper caulking tools should be used; and used carefully. Caulking should never be done except when the boiler is down. Serious accidents may result if caulking is done when the boiler is fired and under pressure. In addition, care should be taken always to keep from lifting seams while caulking. This, of course, can be avoided by using caulking tools lightly.

Part of the facts contained in this message are from the API Bulletin, "Recommended Field Practice". On request, we will be glad to send you a copy.

★ ★



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East Texas Leads U. S. Fields in Both Cumulative and Current Production

ONLY about 50 oil fields of the United States so far have graduated into the select group having to their credit over 100,000,000 barrels of crude oil production each, although some others are well on the way toward that distinction, as revealed in the cumulative production columns of the tables (beginning on page 129) giving salient statistics of the oil fields of the country.

Heading the list as the No. 1 field of the nation, without any close rival, is East Texas which had produced about 1,821,593,932 barrels in the 12 years from discovery in late 1930 to the end of 1942. That is more oil than has been produced in any entire state except Texas, California and Oklahoma.

The Seminole area of Oklahoma has produced over a billion barrels, but it is composed of numerous closely related pools, and some of those pools individually have produced over 100,000,000 barrels each. The Midway-Sunset field of California has produced nearly a billion barrels.

Around ½ billion barrels in cumulated production are Long Beach, Santa Fe Springs, and Coalinga in California, and the Oklahoma City field.

East Texas also stands head and shoulders among the leading fields in current daily average production, despite being strictly curtailed under proration, as it has been throughout most of its history. While East Texas was producing over 350,000 barrels of crude per day at the end of 1942, no other field in the country was yielding as much as 100,000 barrels daily, although Wilmington in California was close to that level. Meanwhile, four others were producing above 50,000 barrels daily, including Coalinga, California; Oklahoma City; Tinsley, Mississippi; and Midway-Sunset, California.

Leading Fields in Current Daily Average Production

FIELD	State or District	Year Found	PRODUCTION AT END OF 1942		
			Number of Oil Wells Producing	Daily Av. per Well (Barrels)	Daily Av. Whole Field (Barrels)
No. 1 Field:					
East Texas	Eastern Texas	1930	25,375	14	358,238
50,000-100,000 Barrels Day					
Wilmington	California	1937	1,094	87	94,907
Coalinga	California	1896	1,357	46	62,842
Oklahoma City	Oklahoma	1928	781	79	61,500
Tinsley	Mississippi	1939	338	167	56,561
Midway-Sunset	California	1901	3,230	17	55,872
30,000-50,000 Barrels Day					
Conroe	Upper Texas Coast	1931	933	48	44,340
Louden	Illinois	1937	1,932	22	42,600
Ventura Avenue	California	1926	401	106	42,517
Hastings	Upper Texas Coast	1934	683	59	40,318
Santa Maria-Lompoc	California	1902	502	79	39,903
Kettleman, North Dome	California	1928	245	159	39,022
Huntington Beach	California	1920	683	55	37,549
Long Beach	California	1921	1,216	28	34,347
Salem	Illinois	1938	2,387	14	32,250
K-M-A-Iowa Park	North Texas	1913	1,764	18	32,117
20,000-30,000 Barrels Day					
Trapp	Kansas	1939	882	34	29,823
Reed City	Michigan	1940	189	145	27,399
Silica	Kansas	1931	774	34	26,363
Talco	East Texas	1936	745	35	26,329
Dominguez	California	1923	298	79	23,681
Tomoconnor	Lower Texas Coast	1934	448	53	23,662
Slaughter	West Texas	1937	1,180	20	23,511
Yates	West Texas	1926	578	38	22,007
Wasson	West Texas	1937	1,372	16	21,975
Lance Creek	Wyoming	1915	179	122	21,843
Santa Fe Springs	California	1921	577	38	21,729
Hawkins	East Texas	1940	361	59	21,164
Mount Poso	California	1927	404	50	20,368
15,000-20,000 Barrels Day					
Inglewood	California	1924	280	69	19,187
Thompsons	Upper Texas Coast	1931	349	52	18,126
Ville Platte (Wilcox)	S. Louisiana	1939	207	85	17,558
Haynesville	North Louisiana	1919	405	43	17,400
Magnolia	Arkansas	1938	115	150	17,241
Cole's Levee	California	1938	123	138	16,943
Monument	New Mexico	1934	500	33	16,714
Bemis	Kansas	1935	423	38	16,314
Schuler	Arkansas	1937	*176	92	16,181
West Ranch	Lower Texas Coast	1938	377	42	15,978
Kern River	California	1900	2,456	6	15,868
Cut Bank	Montana	1932	703	22	15,422
Eunice	New Mexico	1928	486	32	15,371
Oregon Basin	Wyoming	1912	78	195	15,231
Gulf-McElroy	West Texas	1926	595	25	15,149
Goldsmith-Cummings	West Texas	1935	947	16	15,115
Magnet-Withere...	Upper Texas Coast	1936	396	38	15,007

* Including 94 Jones sand wells shut in under operation of unit.

Fields That Have Produced Over 100 Million Barrels Each

FIELD	State or District	Year Found	Barrels in 1941	Barrels in 1942	Cumulative Through 1942
No. 1 Field:					
East Texas	Eastern Texas	1930	130,429,151	120,835,561	1,821,593,932
Around Billion Bbls.:					
Seminole Area†	Oklahoma	1926	39,841,200	33,954,700	1,183,459,300
Midway-Sunset	California	1901	17,461,065	20,475,029	930,947,190
Around ½ Billion Barrels					
Long Beach	California	1921	14,697,968	13,135,518	681,117,701
Oklahoma City	Oklahoma	1928	31,983,935	26,297,315	571,619,200
Santa Fe Springs	California	1921	8,552,454	7,807,231	482,462,989
Coalinga	California	1896	14,223,798	19,235,599	405,374,883
300-400 Million Barrels					
Smackover	Arkansas	1922	5,352,519	4,911,530	394,215,899
Cushing	E. Central Okla.	1912	3,245,215	3,068,700	362,428,300
Kern River	California	1900	4,314,773	5,751,518	334,428,017
Huntington Beach	California	1920	10,743,234	12,277,748	313,810,973
Salt Creek	Wyoming	1908	5,086,040	5,054,846	303,704,601
200-300 Million Barrels					
Yates	West Texas	1926	5,599,313	6,691,116	266,777,967
Kettleman North Dome	California	1928	13,982,789	12,970,940	265,225,723
Ventura Avenue	California	1926	12,891,691	13,636,650	241,232,536
Glenn	E. Central Okla.	1905	1,319,840	1,460,700	222,054,800
Burbank	Osage Co. Area, Oklahoma	1920	3,274,050	3,355,800	208,518,900
Hendrick	West Texas	1926	2,815,010	2,538,354	207,884,081
150-200 Million Barrels					
Healdton	S. E. Oklahoma	1913	3,982,425	2,826,900	193,376,500
El Dorado	Kansas	1917	2,597,000	2,547,390	182,446,500
Wilmington	California	1937	33,672,052	33,685,637	174,007,278
Brea-Olinda	California	1897	2,078,698	3,740,987	172,791,139
Salem	Illinois	1938	29,812,400	14,731,300	167,248,900
Elk Hills	California	1919	3,490,570	4,388,808	162,184,774
St. Louis	Seminole Area Oklahoma	1927	6,479,480	5,054,800	159,488,100
Santa Maria Lompoc	California	1902	3,182,645	2,748,568	159,253,399
Burkburnett	North Texas	1912	1,815,000	*1,800,000	157,900,000
Caddo-Pine Island	N. Louisiana	1904	2,312,900	2,985,700	155,748,238
100-150 Million Barrels					
Electra	North Texas	1911	2,520,000	*2,325,000	144,775,000
Conroe	Upper Texas Coast	1931	11,621,299	13,499,571	142,062,302
Dominguez	California	1923	8,494,506	7,911,696	138,268,799
Rodessa: Total			14,227,362	7,924,538	136,183,868
	North Louisiana	1930	6,904,220	4,776,556	78,485,696
	East Texas	1935	6,606,149	3,147,982	51,459,982
	South Arkansas	1937	716,993		6,244,190
Van	Eastern Texas	1929	3,670,578	3,383,700	132,600,241
Inglewood	California	1924	4,991,012	6,763,872	132,582,884
Montebello	California	1917	4,884,397	3,981,338	131,494,110
Seminole City	Seminole Area Oklahoma	1926	2,230,880	1,983,500	130,823,200
Coyote, West	California	1909	3,075,949	3,774,144	129,850,369
Spindle Top	Upper Texas Coast	1901	487,956	419,082	128,405,556
Earlsboro	Seminole Area Oklahoma	1926	1,351,595	1,122,900	126,597,700
Humble	Upper Texas Coast	1904	916,563	840,045	125,056,769
Tonkawa	Kay Co., N. Okla.	1921	631,815	601,200	121,969,500
Bowlegs	Seminole Area Oklahoma	1926	2,156,785	1,899,600	121,024,000
Powell	Eastern Texas	1900	585,304	558,490	120,894,472
Little River	Seminole Area Oklahoma	1927	2,269,570	1,878,800	113,598,300
Torrance	California	1922	3,210,235	3,066,766	107,810,891
Chalk	West Texas	1926	4,727,684	4,812,835	104,831,550
Hobbs	New Mexico	1928	3,624,159	2,979,177	101,080,053
Big Lake	West Texas	1923	2,020,591	1,896,802	100,177,154

† Seminole Area as shown in this table includes numerous pools of Hughes, Okfuskee, Pottowatomie and Seminole Counties.
* Estimated.

Control...

THE CRITICAL FACTOR IN AIRCRAFT CARRIER OR STEEL CASTING

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ORIGINAL AMERICAN LICENSEE GEORGE FISCHER (SWISS CHAMOTTE) METHOD

LEBANON *Stainless and Special Alloy* STEEL CASTINGS

CIRCLE Ⓛ

Pipe Line Construction Rises To Highest Recent Level

Gigantic war emergency program to provide delivery facilities to East paces 1942, and promises 1943 will be a fairly active year

PACED by a gigantic industry-government war emergency program designed to provide inland delivery facilities to the East Coast to replace normal ocean tanker movements, pipe-line-construction activity in the United States during 1942 rose to the highest level in many years. With a sizeable volume of construction work still under way the close of the year starting 1943 off at a nice pace, prospects are that pipe-line building this year will continue fairly active although unlikely to approach the record of the past year. Much will depend upon whether conditions necessitate construction of such large transcontinental systems as a second big carrier from Texas to the Atlantic Seaboard and connecting of Texas fields with the West Coast.

All in all, 1942 was the most remarkable 12 months in oil transportation history. With tank ships normally handling something like 1,400,000 barrels daily between the Gulf Coast and the heavy consuming Eastern Seaboard area, both the resources and ingenuity of industry and government were heavily burdened in attempting to provide adequate substitute means when nearly all oil boats were suddenly drafted into military service following Pearl Harbor. The whole pattern of oil's shipping systems had to be changed in order to perform the functions, for the normal direction of petroleum's flow to one third of its markets had to be reversed. The effort necessarily not only called for greatly increased use of pipe lines, expansion of which was made difficult due to war demands for metal, but also for expanded use of railroad and barge facilities.

Despite numerous difficulties in securing the necessary pipe, pumps, motors, valves, fittings and other accessories incidental to pipe-line construction, the comprehensive industry-government East Coast pipe line program was well along toward completion by the end of the year. It will result not only in a marked increase in petroleum delivered via pipe lines to the East Coast during the first part of 1943, but also for gains in rail and barge deliveries through shortening of distances these services have to travel.

Pipe Line Construction Trend

YEAR	MILES OF PIPE LINE COMPLETED				*Miles Building
	Oil	Product	Gas	Total	
1942	4200	2100	1250	7550	1715
1941	2900	2700	1700	7300	768
1940	1615	575	810	3000	1150
1939	3155	840	305	4300	1220
Breakdown of 1942 Activity:					
Government	3188	1730	...	4918	1423
Other	1000	370	1250	2630	290

* Miles of pipe line on which construction was underway at end of year.

The emergency oil shipping program, including pipe-line, rail and barge deliveries, was moving nearly 1,000,000 barrels of oil into the Eastern area in December in contrast with but 200,000 barrels daily by these routes the previous January. By mid-1943, a total of nearly 1,500,000 barrels of petroleum should be reaching the East Coast every day through inland systems.

Turning to rail movements as the easiest method of getting quick results, tank cars from all over the country were pressed into Eastern service. Deliveries of petroleum by this method rose from 98,875 barrels per day in January, to 500,000 barrels by April, and to a daily peak of 830,490 barrels in September, and with shorter hauls to be provided through completion of new pipe line, rail deliveries are expected to reach 950,000 barrels per day by mid-1943.

Enlarged pipe-line deliveries were necessarily more slow in developing, because of construction requirements, but deliveries by underground carriers grew from 64,193 barrels in January to 158,633 barrels in December, and should approach 500,000 barrels per day by the end of 1943. These figures, however, are only a partial picture of the importance pipe lines are playing in providing relief to the East Coast shortage, for new carriers are also assisting rail and barge deliveries to a substantial extent through providing shorter hauls for both these services in many instances.

Daily Average Deliveries to East Coast by Tank Cars and Pipe Lines

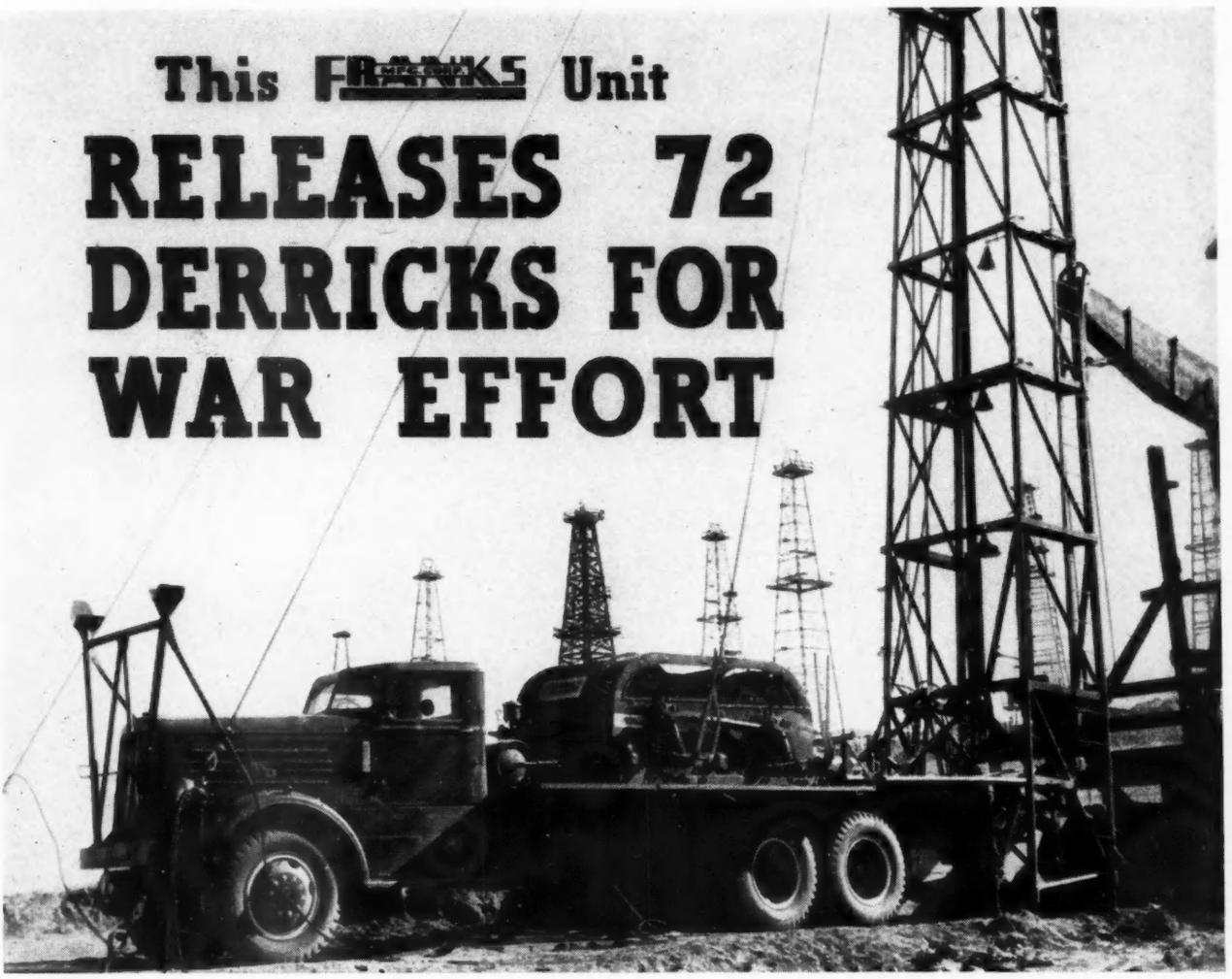
MONTH	Tank Cars	Pipe Line
1942:		
January	98,875	64,193
February	282,522	80,142
March	467,458	103,290
April	585,313	105,533
May	651,361	130,225
June	692,334	131,367
July	770,601	125,032
August	819,499	128,388
September	830,400	127,540
October	778,341	130,454
November	774,760	130,469
December	741,257	158,633
1943 Outlook:		
1st Quarter	800,000	185,000
2nd Quarter	950,000	195,000
3rd Quarter	850,000	450,000
4th Quarter	810,000	490,000

Inland-waterway movement to the East nearly doubled during 1942, rising from something like 50,000 barrels daily in January to 100,000 barrels per day in December. The movement by this method should rise to 175,000 barrels in the second quarter of 1943 and then to 200,000 barrels per day in the third quarter of this year.

Recent approval by WPB of a program to enlarge barge facilities will permit prompt construction of 500 wooden barges of 6000 barrels capacity each for the transportation of residual fuel oil, and 400 dry cargo wooden barges suitable for replacing steel barges now engaged in dry-cargo service, to the end that such steel barges may be made available for conversion to petroleum service. Early completion of 21 steel-hulled steam-powered towboats of 2000 horsepower each and 100 wooden-hulled tugboats with diesel engines of 600 horsepower each is contemplated. At present, additions to the inland waterway barge fleet are progressing at the rate of 20 to 30 barges per month, as a result of previous WPB allocation of materials for conversion of 259 steel barges from other cargo service to the transport of petroleum.

Headed by the government-industry emergency East Coast program, which involved extension of existing lines, reversal of others, building of loops, the

This FRANKS Unit RELEASES 72 DERRICKS FOR WAR EFFORT



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For wells being placed on the pump, Franks portable units are *not only* the most economical for servicing operations, but they *save* tons of steel in derricks (and crown blocks where the practice is to use individual blocks); *save* in labor since before pulling operations are begun they require only backing into location, raising of the derrick by a patented mechanical screw device in seven to ten minutes (lines and blocks are carried strung).

Franks servicing units may be secured with a detachable derrick, which, after being raised, may be easily unhinged and left standing with pipe or rods stacked while the truck and winch are used elsewhere. Or, the derrick may be used with a skid work over unit. When the telescoping derrick is folded down over the truck, the units are within highway limits for length and width.

Franks various models of truck-mounted telescoping derrick units are available in capacities from 60,000 to 200,000 lbs. gross, with derricks up to 96 ft. when fully extended. See Composite Catalog or write Franks for complete details.

Franks is now serving in the war effort, but can supply your needs upon proper priority. Our experience in making war materials is enabling us to design an even better servicing unit and portable drilling rig.

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installation of additional pumping equipment, as well as the construction of new lines, approximately 7550 miles of crude-oil, refined-product and natural-gas pipe lines were completed during 1942. This figure does not include many miscellaneous short carriers or gathering systems. In comparison 7300 miles of pipe line were built in 1941, 3000 in 1940 and 4300 in 1939.

An additional 1715 miles of lines were under construction at the end of 1942, in contrast with 770 miles being built at the close of 1940 and 1150 miles under way the end of 1941.

Crude-oil pipe-line construction for the second consecutive year headed the volume of work, and by a wider margin than a year ago. Oil lines accounted for approximately 4200 miles of the 7550 miles built during the year, compared with 2900 miles of oil carriers in 1941. Product-line construction dropped to 2100 miles in 1942 against 2700 miles in 1941. Construction of gas lines also declined, to 1250 miles against 1700 miles in 1941.

The government-industry program to provide substitute delivery methods to the East Coast, involving a total of 6341 miles of construction, not including 2800 miles of reversal, was responsible for the major portion of the year's pipe-line activity. Of the 7550 miles of pipe lines actually completed during the year, this program accounted for 4918 miles, and was also responsible for 1423 miles of the 1715 miles under construction at the end of the year.

The government-industry program, which will cost well in excess of $100,000,000, involved: 4436 miles of oil lines, of which 3188 miles had been completed at the end of the year, and 1248 miles under construction or to get under way immediately; 1905 miles of product lines, of which 1730 miles were completed and 175 miles being built. Included in the 2800 miles of lines reversed, all accomplished but 800 miles, were systems in Texas to move oil north instead of south to the coast, and product carriers in the East which were reversed to bring petroleum from the west to the Atlantic Seaboard instead of moving refined products inland. Many of the reversed lines were also converted, oil lines to products and product systems to crude oil.

With the scarcity of pipe and other metal equipment the maximum use of second-hand materials was made necessary. The government-industry program for 6341 miles alone involving the use of 1913 miles of pipe that was taken up, reconditioned and relocated.

Heading the list of pipe-line construction was the largest and longest system in the world, a 24-inch 1400-mile carrier from Longview, Texas, to refining centers at both New York and Philadelphia. The first section of this important system, from Longview to Norris City, Illinois, was being placed in operation in late January, 1943. It is estimated that this line will result in a net increase of approximately 120,000 barrels daily to the East Coast. Oil from Norris City will be moved eastward by existing lines, railroads and barges. On October 27, the War Production Board authorized extension of the 24-inch line to the Eastern Seaboard. This second leg, which will provide a 300,000-barrel-per-day carrier all the way from Texas to the Atlantic Seaboard, is scheduled for completion in June, 1943.

However, as a cooperative effort this mammoth line did not excel several other projects, in which a number of differently owned systems were tied together, enlarged, and reversed to form a single continuous overland shipping facility from Texas through Oklahoma, Kansas and Illinois to the Eastern Seaboard.

The reversal of oil's normal direction of flow to the East Coast presented several complications. It called for many adjustments and reversals in Texas. The refining schedules of Gulf Coast refineries, largest refining center in the world, were affected. The most far-reaching complications, of course, result from the big-inch 300,000-barrel pipe line. To replace the loss of East Texas crude at these refineries it was necessary to provide means of getting larger quantities of West Texas and Southwest Texas oil to Houston and Beaumont. In addition to the construction of an 8-inch line from Corpus Christi to Houston, a large gas line was converted to an oil carrier. Some of the lines that normally carried East Texas crude to Houston-Beaumont refineries are scheduled for early reversal. This will permit moving of crude north to Longview, then into the big-inch line. To augment the East Coast supply of heating oil, some of the reversed lines between Houston-Beaumont and Longview will carry heating oil to the big-inch line. It is likely that the big-inch will operate on something like 100,000 barrels of heating oil and 200,000 barrels of crude oil per day when it first reaches maximum capacity.

GOVERNMENT-INDUSTRY PIPE LINE PROGRAM

Project No. 1

By expansion and reversal of existing pipe lines, crude oil deliveries to Illinois increased by 40,000 barrels daily, of which about 27,000 barrels will reach the East Coast through added connecting links, expansions and reversal:

Part A—To increase movement from Texas into Oklahoma, The Texas Pipe Line Company converted and reversed 8-inch line from Port Arthur to Dallas; installed pump station at Waxahachie, Texas; increased capacity between Dallas and Stuart, Oklahoma, by about 21,000 barrels daily through laying of 69 miles of 10-inch and 43 miles of 8-inch second-hand-pipe loops.

Stanolind Pipe Line Company increased capacity between Graford, Texas, and Healdton, Oklahoma, by laying 54 miles 12-inch loops and installing pump station at Devol, Oklahoma.

Part B—To increase movement from Oklahoma and Kansas to Illinois, Stanolind installed superchargers to increase capacity between Kansas and Illinois.

Texas-Empire Pipe Line Company increased capacity between Kansas and Sheldon, Missouri, by 14,000 barrels daily through construction of pump stations at Valley Center and Hiattville, Kansas; increased capacity 30,000 barrels daily between Sheldon and Heyworth, Illinois, by new station at Centralia, Missouri, and installation of additional pumping equipment at intermediate stations.

Ajax, Shell and Stanolind all replaced several river crossings to improve their Oklahoma to Illinois systems.

Part C—To increase movement from Illinois eastward, Buckeye Pipe Line Company boosted capacity between Mantua, Ohio, and Cooks Ferry, Pennsylvania, by 5000 barrels daily through installation of additional pumping equipment.

Illinois Pipe Line Company laid 152 miles of 8-inch loops across Ohio.

Tuscarora Oil Company reversed gasoline line between Bayway, New Jersey, and Negley, Ohio, and converted to crude oil. It handles 20,000 barrels daily, 15,000 barrels from Illinois Pipe Line and 5000 barrels through existing facilities of Buckeye and National Transit Pipe Lines via Bear Creek, Pennsylvania.

Tide Water expects to increase capacity by additional 2000 barrels daily between Rixford, Pennsylvania, and Bayway, by enlarged station at Green Brook, New Jersey. Completion expected March 15.

Southern Pipe Line Company by increasing pressure and construction of two new stations, one of which is completed, expects to handle additional 5000 barrels of oil.

Project No. 2

Petroleum product deliveries to East increased by 30,000 barrels through increase in capacity of Plantation line from 60,000 to 90,000 barrels daily, and extension of line further east and also extension of line westward to assure sufficient supplies:

Part A—Bayou Pipe Line Company in January, 1943, completed laying 80 miles of 8-inch between Houston and Beaumont, and 212 miles of 10-inch second-hand pipe between Beaumont and Baton Rouge, and was constructing 51 miles of 8-inch feeder lines to Baytown. All stations will be completed by March 1, at which time line will attain capacity of 60,000 barrels daily delivered to Plantation at Baton Rouge.

Part B—Fourteen additional stations completed on Baton Rouge to Greensboro original Plantation line in January, 1943, to boost capacity from 60,000 to 90,000 barrels daily.

Part C—Extension of Plantation line from Greensboro to Richmond, Virginia, with 175 miles of second-hand 8-inch pipe, scheduled for completion March 15. Capacity 30,000 barrels daily.

Project No. 3

To increase product shipping capacity from Illinois eastward:

Sun-Susquehanna line pumping 15,000 barrels from Cleveland to Eastern Seaboard after being reversed.

Shell enlarged its line from Zionsville, Indiana, to Lima, Ohio, by installing pump station at Muncie, Indiana.

Ohio Emergency Link between Tiffin and Akron to provide means of connecting Shell and Sun-Susquehanna lines is under construction. It will require 82 miles of second-hand pipe. This will provide a winter route. Meanwhile, Shell has been delivering products to Toledo for movement by lake tankers and barges to Cleveland and thence eastward through reversed Sun-Susquehanna system. Emergency link due to be completed shortly.

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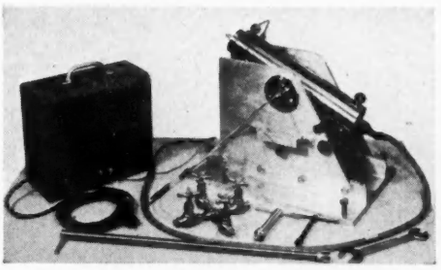
Within ONE organization E.L.I. offers complete facilities for Research, Design and Manufacture of precision instruments and equipment, which include:



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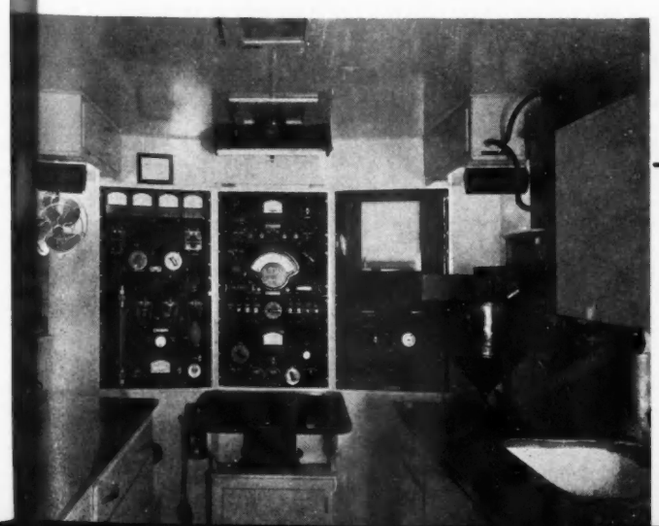

Interior view of Well Logging Unit built for BAROID SALES DIVISION

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- E.L.I. Multiple-Trace Direct Printing Recorder
- Pipe Line Detector

GOVERNMENT-INDUSTRY PIPE LINE PROGRAM

Project No. 4

To increase pipe line capacity in East to handle enlarged barge deliveries:

Keystone (Atlantic) reversed and converted its 280-mile product system between Philadelphia and Pittsburgh and is now pumping 26,000 barrels daily east.

Keystone line to Buffalo originally was scheduled to be reversed, but later abandoned as not justified because of lack of supply.

Sinclair 6-inch 15,000-barrel line from Steubenville, Ohio, to Philadelphia, nearly completed.

Project No. 5

Increasing deliveries of products to East by making deliveries on Mississippi River to shorten barge distance. All work on this project completed:

Gulf Refining Company reversed and converted crude line to move products from Port Arthur, Texas, to El Dorado, Arkansas. Line being looped with 125 miles of 6- and 8-inch.

Magnolia Pipe Line Company reversed and converted oil line to ship products from Benton Junction, Louisiana, to El Dorado, Arkansas.

The Texas Pipe Line Company reversed 190-mile 8-inch 20,000-barrel line between Shreveport and Port Arthur, and connected it to above Magnolia line by laying 15-mile extension from Bossier City to Benton Junction.

Project Five Pipe Line Company constructed 158-mile line from El Dorado to Helena, Arkansas, using 10-inch second-hand pipe. Line scheduled to be at full capacity of 55,000 barrels daily by February 15. From Helena shipments go by barge up Mississippi and Ohio rivers.

Project No. 6

For construction of 20-inch crude oil line from East Texas to Illinois. This project was held in abeyance in favor of Project No. 8, which was the big-inch pipe line, and also Project No. 9 which would provide for 20-inch product system from East Texas to Atlantic Seaboard.

Project No. 7

Construction of new products pipe line from East Texas to Paducah, Kentucky, or Memphis, Tennessee, to be supplied by reversal and conversion of several crude oil lines from East Texas to Houston. This project has been held in abeyance in favor of Project No. 9.

Project No. 8

Construction of new 24-inch line from East Texas to Southern Illinois and extension to New York and Philadelphia refinery centers. This is the so-called big-inch pipe line, to move 300,000 barrels daily from Texas to East Coast:

War Emergency Pipe Line, Inc., finished laying 522 miles of 24-inch pipe between Longview, Texas, and Norris City, Illinois, in January, 1943. Line was immediately placed in operation at part capacity due to all stations not being completed. Full capacity of 300,000 barrels daily not likely to be reached before March. It will handle fuel oil and crude oil. At Norris City, oil will be transferred to barges, tank cars and other pipe lines for shipment eastward until second section (see below) of line is completed. Due to shorter haul the Texas-Illinois section expected to improve deliveries east by 100,000 to 150,000 barrels daily. Plans for building the line were finished in spring of 1941, but WPB did not give approval until June, 1942, and then only on Texas-Illinois section. War Emergency Pipe Line, Inc., also constructed the following crude oil gathering system in East Texas: 5 miles of 24-inch; 3.3 miles of 16-inch; and 13 miles of 10-inch. In addition the following product gathering system was built in East Texas: 31 miles of 16-inch, and 19 miles of 10-inch.

War Emergency Pipe Line, Inc., in January, 1943, started construction of 857-mile 24-inch system from Norris City, to New York and Philadelphia refining centers. This will provide 300,000-barrels-per-day 24-inch carrier all the way to the Atlantic Seaboard when completed about June, 1943. Construction of this extension of 24-inch line was approved by WPB on October 27, 1942.

Project No. 9

Conversion of 20-inch crude line listed under Project No. 6 and extension to East Coast. This project was held in abeyance in favor of Project No. 8 big-inch line. With East Coast situation extremely critical in late 1942, PAW filed application for construction of this line with WPB. Good possibility line may be constructed after big-inch line finished. There also is some talk of increasing size from 20-inch to 24-inch. Line would be furnished through conversion and reversal of several lines between Houston and East Texas field.

Project No. 12

A products line across northern Florida to connect intercoastal canals along Gulf of Mexico and Atlantic Seaboard:

Trans-Florida Pipe Line Company expects to complete by February 15 an 8-inch 202-mile second-hand system between Carrabelle and Jacksonville, Florida. Capacity will be 35,000 barrels daily.

Project No. 13

To furnish crude to Houston refineries lost as result of diverting East Texas oil into big-inch line:

Sinclair Refining Company laid 160 miles of second-hand 8-inch between Corpus Christi and Damon Mound, near Houston. It handles 20,000 barrels daily, and was completed in January, 1943, also.

Project No. 14

To bring special Louisiana crudes to Texas refineries for production of war products:

The Texas Pipe Line Company now laying 268-mile combination 8- and 10-inch system with second-hand materials from Paradis, Louisiana, through Erath to Port Arthur. Line will have minimum capacity of 20,000 barrels daily with a maximum capacity of 45,000 barrels. Due to be completed in February, 1943.

Project No. 15

To provide additional fuel oil and gasoline for northwest area of District 2:

Great Lakes Pipe Line Company constructed 60 miles of 6-inch line between Drumright-Cushing and Barnsdall, Oklahoma. This was feeder line to three refineries in Drumright-Cushing area. This provided 10,000 barrels additional for Kansas City area.

Great Lakes relocated pumping equipment on main line to increase capacity by 11,000 barrels from Kansas City to Des Moines and by 5500 barrels from Des Moines to Minneapolis.

Other Government Projects

East Texas to Houston-Beaumont Reversals—To supply fuel and crude to big-inch line, two or three lines that have heretofore pumped oil from East Texas to Houston-Beaumont refineries may be reversed. Contemplations considering Sun's 132-mile 10-inch to Beaumont; Pan American's 205-mile 12-inch to Houston; and Shell's 208-mile line to Houston.

Corpus Christi-Houston—To replace East Texas oil at Houston-Beaumont refineries, due to big-inch takings, an additional carrier from Southwest Texas will be provided through conversion of United Gas Company's 150-mile gas system. It will be extended from Pierce Junction to Houston, a distance of 15 miles. Defense Plant Corporation has purchased the system and named Humble Oil & Refining Company agent. Conversion is expected to be completed by May 1. The line, which consists of 58 miles of 14-inch and 92 miles of 16-inch, probably will bring some fuel oil from Corpus Christi refineries to Houston so it can be diverted to East Texas for the big inch line.

OTHER PIPE LINE CONSTRUCTION

California

Stanpec Natural Gas Company's Kettleman Hills to San Francisco 195-mile combination 24-26-inch gas line converted to crude oil. Handling 100,000 barrels daily.

Illinois

Magnolia Pipe Line Company provided outlet for St. Jacob field by laying 5.4-mile 4-inch 3000-barrel line to main line running to East St. Louis.

Kansas

W. S. Fees Pipe Line Company completed 14-mile 4-inch gas line from McLouth to Dunavent.

Kaw Pipe Line Company completed 17-mile 12-inch loop on oil line from Chase to Chaflin. Increased capacity 20,000 barrels.

Union Gas System, Inc., proposes a 300-mile gas system from Hugoton field across Kansas into western Missouri.

Northern Natural Gas Company added 30-mile 20-24-inch loop to main line in northern Kansas, and added compressors.

Socony-Vacuum Oil Company laid 24-mile 10-inch loop between Chase and Wherry. Increased capacity 18,000 barrels. Also constructed 15-mile 4-inch 18,000-barrel line from Lindsborg to Ritz.

Bay Petroleum Company built 21-mile 3-inch 8500-barrel line from Lindsborg to McPherson.

Stanolind Pipe Line Company constructed 17-mile 8-inch 32,000-barrel line from Fairport to Laton.

Louisiana

United Gas Pipe Line Company laid 202-mile combination 16- and 14-inch gas line from Lirette, Louisiana, to Mobile, Alabama.

Atlantic Pipe Line Company built 70-mile 8-inch 12,000-barrel line to move Neale field, Louisiana, oil to Atreco, Texas, refinery, but later reversed it to move Texas oil further east. From Neale oil now moves east by rail.

Standard of Louisiana constructed 25 miles of 6-inch oil line from Pine Prairie to Bunkie; and also 20 miles of 6-inch oil line from Bayou Sale to Jeanerette.

Memphis Natural Gas Company added 52 miles of 16- and 20-inch to its gas line from Monroe, Louisiana, to Memphis, Tennessee.

Hope Natural Gas Company has plans for 772-mile 20-inch gas from Monroe field to Charleston, West Virginia.

Michigan

Panhandle Eastern Pipe Line Company laid 174 miles of 12- and 22-inch gas line between Toledo, Ohio, and Zilwaukee, Michigan; and 85 miles of 12-inch gas line from Manchester to Kalamazoo.

Dow Chemical Company constructed 12-mile 4- and 6-inch gas line from Temple to Sylvan field.

Simrall Corporation built 11-mile combination 4- and 6-inch 5000-barrel oil system from Fork field to Evart Junction.

Leonard Pipe Line Company built 3-mile 6-inch 5000-barrel line from Fork field to Barryton.

Missouri

Phillips Petroleum Company laid 70 miles of 8-inch loops between Harrisonville and St. Louis. This was on its gasoline line from Panhandle.

Tiger Oil & Pipe Line Company completed 38 miles of 12-inch gas line from Polo field to Independence.

Oklahoma

Gulf Refining Company enlarged Oklahoma-to-Indiana system by 10,000 barrels daily by laying 203 miles of 10-inch loops between Glenn Pool, Oklahoma, and Dublin, Indiana.

Oklahoma Natural Gas Company laid 100 miles of 12-inch gas line from Chickasha area to Stroud and Cookson.

Sinclair Refining Company built 22-mile 14-inch 28,000-barrel oil line from Drumright to Prue.

The Texas Pipe Line Company provided outlet for Apache pool by constructing 101 miles of 8-inch oil line to Seminole. Capacity 30,000 barrels.

Cities Service Oil Company laid 36-mile 12-inch gas line from Blackwell to Burbank field.

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OTHER PIPE LINE CONSTRUCTION

Oklahoma—Continued

Sunray Oil Company constructed 14-mile 4-inch 3000-barrel line from Bebee area to Allen.

Oklahoma Pipe Line Company proposes a 10-mile 10-inch 16,000-barrel connection between Hewitt and Stanolind Pipe Line system.

Lone Star Gas Company completed 27 miles 10-inch gas line from Cumberland to Durant, Oklahoma.

East Texas

Lone Star Gas Company completed the following gas lines: 3¼-mile 4-inch from Hooser to Kerens; 37-mile 18-inch loop between Alma and Duncanville; 28-mile 12-inch loop between Dew and Groesbeck; 3½-mile 10-inch loop between Dew and Groesbeck; 10-mile 8-inch between Groesbeck and Nigger Creek; 4-mile 8-inch from Dew to Teague; 3½-mile 4-inch line from Cayuga to Tri-Cities.

Sinclair Refining Company built 7.8-mile 4-inch 6000-barrel line from Chapel Hill field to East Texas field; and laid 6 miles of 6-inch gathering lines and 6 miles of 4-inch gathering lines in Chapel Hill field.

Humble Pipe Line Company laid 5¾-mile 8-inch loop between Kilgore and Longview.

North Texas

Continental Pipe Line Company completed 22-mile 4-inch 3500-barrel line from Halsell-Ross to Thornberry, and laid 3½-mile 3-inch 1500-barrel line to Joy field.

Sinclair Refining Company constructed 5500-barrel 17-mile 4-inch line from Forestburg to Bowie station; and a 2-mile 3-inch 1500-barrel line from Watson to Antelope.

Stanolind Pipe Line Company is building 24½ miles of 8-inch loops between Trinity River and Bowie station; and 24½ miles of 12-inch loops between Graford and Trinity River; and proposes 76-mile 8-inch loops between Mexia and Graford.

Texas Panhandle

Cities Service Gas Company completed 14-mile 14-inch gas line from Burnett to Pantex Ordnance Depot.

Humble Pipe Line Company laid 16-mile 8-inch 30,000-barrel oil line from Wilcox to trunk line.

West Central Texas

Baird Refining Company completed 2¼ miles of 4-inch between Silver Valley and Novice, and 2¼ miles of 2½-inch between Coker and Novice.

Onyx Pipe Line Company laid 4 miles of 3½-inch loop between Akard and its refinery, 2½-mile 4-inch 2200-barrel line from Wimberley to Akard, and 3-mile 3½-inch 1500-barrel line from Merkel to Wimberley.

Southwest Texas

Magnolia Pipe Line Company built 45-mile combination 8- and 10-inch line with second-hand pipe between Ganado and Sealy; looped Sealy to Beaumont line with 62 miles of 8-inch second-hand pipe; built 194-mile combination 14- and 16-inch gas line from West Ranch to Beaumont; looped Sealy to Hull line with 46 miles of 8-inch.

Border Pipe Line Company, subsidiary of Gulf States Oil Company, has started building 140-mile gas line from San Salvador field, Hidalgo County, Texas, to American Smeltering & Refining Company's plant at La Rosita, Coahuila, Mexico. Capacity 10,000,000 cubic feet daily.

Emsco Pipe Line Company 16-mile 6-inch oil loop between Luby field and Corpus Christi.

Sun Pipe Line Company connected North Rincon field to crude line at Yturria by constructing 15 miles of 4-inch.

Humble Pipe Line Company laid 10-mile 8-inch loop between LaRosa and Taft.

Texas Gulf Coast

Magnolia Pipe Line Company built 12-mile 8-inch line from Beaumont to Port Neches to supply products for Government Project 5 system.

Dow Chemical Company built two gas lines from Old Ocean field to Freeport. One was 21-mile 12-inch, the other a 21-mile 14-inch carrier.

Houston Pipe Line Company laid 37-mile 12-inch gas line from Katy field to Sugarland Junction.

Pan American Pipe Line Company constructed 20-mile 8-inch gas line from Chocolate Bayou field to Texas City refinery.

Sinclair Refining Company proposed 27 miles of 10-inch second-hand loops between Huffman station and Sinco station.

West Texas-New Mexico

Phillips Petroleum Company built 240-mile 8-inch 20,000-barrel natural gasoline carrier between Hobbs, New Mexico, and Borger, Texas. Goldsmith field tied into system by constructing 60-mile 6-inch 10,000-barrel lateral. Phillips also laid 5 miles of 4-inch 3000-barrel capacity line between Embar pool and North Goldsmith.

Humble Pipe Line Company laid 8.1-mile 8-inch loop between Foster and Judkins; 4.4-mile 8-inch loop between Wasson and Hobbs; and 4.4-mile 6-inch loop between Wasson and Hobbs.

El Paso Natural Gas Company built 44-mile 12-inch gas line between Eunice and Loving, New Mexico.

Barney Cockburn et al constructed 50 miles of 3- and 4-inch 3000-barrel oil line between Square Lake and Roswell, New Mexico.

Lea County Water Company built 36-mile 7-inch natural gas line from Eunice to Maljamar.

New Mexico Gas Company laid 6 miles of 8-inch gas line between Barker Dome and Ute, New Mexico.

Fullerton Oil Company built 16-mile 4½-inch 3000-barrel oil line from Fullerton to Andrews Station.

Lone Star Gas Company completed 8-mile 6-inch gas line to San Angelo air base.

Magnolia Pipe Line Company built 2½ miles of 4- and 6-inch line between McKee field and Abell. Capacity 5000 barrels.

Stanolind Pipe Line Company laid 19-mile 6-inch 5000-barrel oil line from Spencer to Wink, and 4 miles of 4-inch 2500-barrel line from Byrd to Spencer.

New Fields and New Pays Found in 1942

PRESENTED herewith are facts and figures on discovery wells of the new fields and new pay horizons that were opened in the United States in 1942.

The discovery well data include information of value in judging the importance of the new sources of oil and gas and in determining other general facts about them. The tables embody data on locations of the tests that opened new fields or pays, date of completion, name, character and age of producing formation, total depths of the wells and depths of producing horizons, pertinent information on initial production, and gravity of oil yielded.

The oil and gas discoveries of 1942, including both new fields and new pay horizons opened, totaled 523, compared with 613 in 1941.

New fields of 1942 alone totaled 348, compared with 346 in 1941.

New pays of 1942 numbered 175, against 267 in 1941.

More complete analysis of these discoveries of 1942 appears in a special article in this issue, treating wildcatting as a whole (including unsuccessful tests). In that general article on prospecting results in 1942 there are given breakdowns of the new fields and new pays by oil, gas, and distillate classifications, and percentage of productive tests among all wildcats drilled is shown. Also embodied in that article are tables on all wildcat footage drilled and on the average producing depths of the new fields and new pays of 1942, compared with average depths of discoveries of earlier years.

Discovery Wells of New Fields and New Pay Zones Opened in U. S. in 1942

NOTES ON DATA IN TABLES

"Initial Production" column: Barrels of oil per day, flowing, pumping, or swabbing; or millions of cubic feet of gas daily; size of choke for restricting production is given in inches.

"Producing Formation" column: ages of producing formations abbreviated as follows: Plio, Pliocene; Mio, Miocene; Olig, Oligocene; Eoc, Eocene; U. Cret, Upper Cretaceous; L. Cret, Lower Cretaceous; Jur, Jurassic; Tri, Triassic; Perm, Permian; Penn, Pennsylvanian; U. Miss, Upper Mississippian; L. Miss, Lower Mississippian; Miss, Mississippian; Devo, Devonian; Sil, Silurian; Ord, Ordovician; Cam, Cambrian.

Arkansas

OIL FIELDS

Field	County	COMPANY, WELL AND LOCATION	Date Completed	Name, Character and Age of Producing Formation	Total Depth (Feet)	Completion Horizon (Feet)	Initial Production, Method, and Choke	Gravity of Oil
McKamie, Cotton Valley	Lafayette	Carter's Cornelius "Unit" 1, 50 ft. s of cent ne 30-17-23	2-11-42	Cotton Valley sand, Jur.	7300	7255-7265	F 288; 1/4"	46.2
Midway	Lafayette	Barnsdall's Bond 1, nw sw 11-15-24	1- -42	Smackover lime, Jur.	6536	6340-6370	F 638; 11/64"	35.6
New London	Union	Marine Oil's Frost 1, c nw ne 13-18s-12w	4-12-42	Cotton Valley sand, Jur.	5880	5760-5770	P 80	32
ARKANSAS: GAS DISTILLATE FIELDS								
Dorcheat, Cotton Valley	Columbia	Atlantic's Pinewoods B-1, se nw 16-18-22	2- 3-42	Cotton Valley sand, Jur.	7888	7860-7875	F 340; 5/32"	65.5
Macedonia Cotton Valley	Columbia	Atlantic's Brewer-Warnock Unit 1, 100 ft. w of c s1/2 sw 15-18-21	7-27-42	Cotton Valley sand, Jur.	8898	8046-8058	F 120; 1/4"	66
Texarkana	Miller	Carter's Orr 1, c se nw 3-16s-28w	9- 7-42	Smackover lime, Jur.	7700	7348-7405	F 96; 1/2"	70.6
ARKANSAS: DRY GAS FIELD								
Clarksville	Pope	Ark-La. Gas Co.'s Ladd-Strong 1, 980 ft. n 1104 ft. e sw 22-10n-21w	10-23-42	Atoka	2830	2475-2514 2802-2817	17 mil. 9 mil.	gas gas

California

OIL FIELDS

Antelope Hills	Kern	Shell's Williams 45-6, 2951 ft s of n l, 2951 ft w of e l of 6-28s-20e	5-11-42	Temblor sd, Mid. Mio.	2340	2280-2340	F 934; 3" tub.	16.4
*Strand, East	Kern	Tide Water's KCL 56-8, 1650 ft n, 300 ft e S1/4c 8-30-26	11-29-42	Stevens sand, Mio.	8207	8100-8187	F 1721	33.8
Buena Park	Orange	Texas Co.'s Spencer 1, 1271 ft sly along e l 1-4-11 fr ne c, thence wly at r/a 336 ft.	3- 7-42	Sand, Plio	8980	8900-8932	F 112	21.5
Holser Canyon	Ventura	Continental's Holser 1, 607 ft n, 1091 ft w of e 14-4-18	7-20-42	Sand, Mio.	4663	4105-4663	P 110	23

* Approximately 1 mile east extension to Strand field.

CALIFORNIA: NEW OIL PAYS

Belridge, North, "Y Pool"	Kern	Belridge Oil's 47, sec 27-27-20	5-17-42	Sand, Olig.	8591	8505-8590	F 1222	30
Belridge, South	Kern	E. A. Parkford's 2, sec 12-29-21	7-28-42	Sand, Plio	1097	-1097	60	12

Illinois

OIL FIELDS

Beaver Creek	Bond	W. C. McBride's V. Jacobs 1, se sw nw 31-4n-2w	6-23-42	Bethel sand, U. Miss.	2526	1116-1127	P 24	..
Bible Grove	Clay	Cameron Bros.' E. H. Landwehr 1, nw nw ne 8-5n-7e	3-24-42	McClosky lime, L. Miss.	2825	2810-2825	P 695	..
Bible Grove, S.	Clay	Kingwood's J. E. Essen 1, nw nw se 20-5n-7e	9- 1-42	Aux. Vases, sand, U. Miss.	2929	2733-2782	P 64	..
	Clay	National Pet.'s Hinterscher 1, nw se se 10-4n-8e	6-23-42	McClosky lime, L. Miss.	3139	3098-	P 5	..
Kenner	Clay	L & W Drlg Co.'s Sanders-Thompson 1, n nw se 30-3n-6e	5-26-42	Bethel sand, U. Miss.	2955	2661-	P 25	..
Sailor Springs, S.	Clay	W. C. McBride, Inc.'s Goldsby-Wilson 1, se sw se 34-4n-7e	5-26-42	Weiler sand, U. Miss.	2599	2584-2599	P 96	..
Toliver	Clay	Big Chief's R. Barbee 1, 35-5n-6e	9-15-42	McClosky lime, L. Miss.	2887	2790-	P 216	..
New Bellair	Crawford	W. Krohn's E. Wiman 1, n ne se 19-8n-13w	3-10-42	Basal Penn	2760	-1380	P 55	..
Albion, North	Edwards	Taylor Drlg's Odle 1, s se sw 30-1s-11e	3-31-42	Aux. Vases sd, U. Miss	3261	3054-	P 19	..
Ellery, North	Edwards	Stanolind's Broster 1, c se se ne 7-2s-10e	11-10-42	McClosky lime, L Miss	3496	3440-	P 35	37.6
Samsville	Edwards	K. M. Menefee's McDowell 2, e s ne 31-2n-14w	1-20-42	Waltersburg sd, U. Miss.	2437	2403-	P 20	..
Akin	Franklin	Seaboard's U. S. Coal & Coke 1, c sw se 14-6s-4e	3-24-42	Cypress sand, U. Miss.	2860	2839-2852	P 113	..
Sesser	Franklin	I. W. Taylor's Old Ben Coal 1, n w ne 19-5s-2e	6- 2-42	Aux. Vases sd, U. Miss.	2716	2701-2716	P 132	..
Valier	Franklin	Menhall's Valier Coal 2, ne ne se 7-6s-2e	5-26-42	McClosky lime, L. Miss.	2725	2713-2725	P 15	..
Inman, North	Gallatin	Aetna Oil's Foster 1, se se ne 19-8s-9e	8-25-42	Aux Vases sand, U. Miss.	3060	2816-2885	P 12	..

DISCOVERY WELLS OF NEW FIELDS AND NEW PAY ZONES OPENED IN U. S. IN 1942

For explanation of data in "Initial Production" and "Producing Formation" columns—see note at beginning of tables, page 97.

Illinois—Continued

OIL FIELDS

Field	County	COMPANY, WELL AND LOCATION	Date Completed	Name, Character and Age of Producing Formation	Total Depth (Feet)	Completion Horizon (Feet)	Initial Production, Method, and Choke	Gravity of Oil
Inman, West	Gallatin	B. Martin's Behl 1, se se nw 15-8s-9e	5-19-42	Weiler sand, U. Miss.	2493	2482-2493	P 75	..
Dundas, East	Jasper	Helmerich & Payne's Stiff Heirs 1, se ne ne 35-5n-10e	7-14-42	McClosky lime, L. Miss.	3011	2999-3011	F 212	..
Coil, West	Jefferson	Gulf's Bradford 1, nw se sw 14-1s-4e	10-13-42	McClosky, Levias, lime, L. Miss.	2981	2791-2797 2854-2860	P 15	..
Kell	Jefferson	Deaten & Bears' B. Howard 1, ne ne nw 5-1s-3e	4-21-42	McClosky lime, L. Miss.	2627	2625-2627	P 192	..
King	Jefferson	Lewis Prod.'s State Game Preserve 1, sw sw se 21-3s-3e	6-23-42	Aux. Vasessand, U. Miss.	2762	2740-2762	P 153	..
Markham City	Jefferson	Lario O. & R. Co.'s Starr Bros. 1, n sw sw 1-3s-4e	8- 4-42	Levias& McClosky lime, L. Miss.	3214	-3214	P 190	..
Plainview	Macoupin	R. G. Whipple's H. C. Rhoads 1, n w se sw 35-9n-8w	1-27-42	Pottsville sand	421	400-421	P 10	..
St. Jacob	Madison	M. D. Bryant's H. Meyer 1, sw ne se 16-3n-6w	6- 2-42	Trenton lime, Ord.	2354	-2354	P 118	..
Mt. Olive	Montgomery	W. R. Holmes' Niemann 1, nw se sw 29-8n-5w	12-15-42	Sand, Penn.	602	600-602	P 40	33.2
Tamaroa	Perry	Harsh's Newborn 1, se se nw 22-4s-1w	3-24-42	Weiler sand, U. Miss.	1530	1127-1150	P 16	..
Amity	Richland	Boles Bros.' W. C. Petty 1, ne se ne 10-4n-14w	9-29-42	McClosky lime, L. Miss.	3089	2961-2997	P 80	..
.....	Richland	Pure's A. Grubb A-1, w sw se 36-3n-8e	5-12-42	McClosky lime, L. Miss.	3025	3015-3025	P 4	..
Friendgrove	Wabash	Skiles et al's Wheatly 1, e ne se 3-1s-13w	9-22-42	Bethel sand, U. Miss.	2477	2464-2477	P 35	..
.....	Washington	Shell's M. Rutger 1, e ne ne 17-1n-7e	9- 1-42	McClosky lime, L. Miss.	3237	3170-3180	P 35	..
Dubois, West	Washington	Gulf's R. Leffner 1, c nw ne nw 13-3s-2w	7- 7-42	Bethel sand, U. Miss.	1685	1346-1353	P 22	..
.....	Wayne	H. H. Weinert's J. Crews 1, s se se 28-1s-8e	7-28-42	Rosiclare sand, L. Miss.	3380	3255-3290	P 20	..
.....	Wayne	C. Robinson & Continental's C. W. Osborne 1, w ne sw 17-2s-8e	9-29-42	Aux Vases sand, U. Miss.	3389	3236-3250	P 16	..
Coil	Wayne	First Nat. Petr. Trust's Ellis 1, c sw ne 18-1s-5e	3-31-42	Aux Vases sand, U. Miss.	3180	2918-2940	P 450	..
Covington	Wayne	Deep Rock's L. A. Blackburn 1, c nw ne 30-1s-7e	6-30-42	McClosky lime, L. Miss.	3290	3238-3257	F 871	..
Geff, West	Wayne	V. A. Thompson's Whitlock 1, c w sw nw 9-1s-7e	9-15-42	Aux Vases sand, U. Miss.	3320	3129-3141	P 100	..
Johnsonville, So.	Wayne	N. V. Duncan's Anderson-Rogers 1, c ne ne 15-1s-6e	5-26-42	McClosky lime, L. Miss.	3265	3212-3229	P 17	..
Johnsonville, W.	Wayne	Bell Bros.' E. Jones 1, w ne se 24-1n-5e	3-10-42	McClosky lime, L. Miss.	3185	3107-3113	P 8	..
Sims, North	Wayne	Texas Co.'s B. Talbert 2, s sw se 17-1s-6e	1- 6-42	McClosky lime, L. Miss.	3209	3183-3209	S 303	..
Carmi	White	Randall & Brown's J. Britt 1, ne nw se 23-5s-9e	7-21-42	Levias lime, L. Miss.	3160	3150-3160	P 30	..
Carmi, North	White	Seaboard's H. Gates 1, sw nw sw 3-5s-9e	3-24-42	Aux Vases sand, U. Miss.	3240	3228-3240	P 62	..
Concord	White	Minerva Oil's P. Ramsey 1, n sw ne 33-6s-10e	3-17-42	Aux Vases sand, U. Miss.	2917	2904-2914	P 28	..

ILLINOIS: GAS FIELDS

.....	Bond	H. A. Hoffman's Wilson 1, c nw ne 24-4n-3w	6-23-42	Bethel Sand, U. Miss.	1124	1112-1120	0.5 mil.	gas
.....	Macoupin	W. R. Holmes' Graham-Kulenkamp 1, nw se sw 7-8n-8w	6-23-42	Pottsvile sand	320	314-320	0.15 mil.	gas
.....	Macoupin	W. R. Holmes' Stephen 1, ne se nw 18-8n-8w	3-10-42	Pottsville sand	624	365-400	1.5 mil.	gas
.....	Macoupin	K. Reay's Stephen 1, nw sw sw 18-8n-8w	5-19-42	Pottsville sand	558	-420	0 1 mil	gas
.....	Montgomery	W. R. Holmes' Klekamp 1, nw se se 29-8n-5w	9- 1-42	Pottsville sand	578	574-578	0.6 mil	gas

ILLINOIS: NEW OIL PAYS

Bible Grove	Clay	Texas Co 's W. Landwehr 1, nw sw ne 8-5n-7e	4-28-42	Weiler sand, U. Miss.	2924	2487-2501	P 185	..
Iola	Clay	H. Luttrell's Reed Heirs 1, c se nw ne 15-5n-5e	11-24-42	Bethel sand, U. Miss.	2350	2292-	P 82	36
Sailor Springs, S.	Clay	W. C. McBride's Harrison & Hagen Comm 1, se ne nw 3-3n-7e	9-15-42	Weiler sand, U. Miss.	2608	2597-2608	P 34	..
Boulder	Clinton	E. F. Jones' Harrison 2, c se nw 2-2n-2w	10- 6-42	Lime, Devo.	2670	2584-	341	..
Parkersburg	Edwards	Sinclair-Wyoming's A. Bierhaus 1, c n nw se 6-1n-14w	7-28-42	Weiler sand, U. Miss.	3216	2832-2870	P 23	..
Parkersburg	Edwards	Magnolia's C. C. Brake 1, n e sw 31-2n-14w	6- 2-42	Paint Creek sd, U. Miss.	3240	2953-2970	P 47	..
Benton, North	Franklin	A. W. Torbett's Isaacs 1-A, sw se nw 1-6s-2e	3-24-42	Paint Creek sd, U. Miss.	2626	2603-2626	P 30	..
Inman, East	Gallatin	Skelly's Egyptian Tie & Timber 1, ne nw ne 21-8s-10e	6-23-42	Waltersburg sd, U. Miss.	2002	1979-2002	P 210	..
Inman, East	Gallatin	Cherry & Kidd's Kervin 5, ne se sw 11-8s-10e	11- 3-42	Clore, Tar Springs, U. Miss.	2057	1725-	P 177	..
Hoodville	Hamilton	Magnolia's Betts-Barker 1, c sw sw 11-6s-6e	4-21-42	Levias lime, L. Miss.	3163	3153-3163	P 32	..
Walpole	Hamilton	Texas Co.'s R. Hall 3, sw nw 27-6s-6e	5-26-42	Tar Springs sd, U. Miss.	3127	2464-2472	P 94	..
Rural Hill	Hamilton	Gulf's B. W. Johnson 1, nw sw sw 17-6s-7e	10-27-42	Cypress sand, U. Miss.	2755	2707-	P 30	..
Boos, North	Jasper	Pure's Swick Cons. A-1, c se nw 20-6n-10e	11- 3-42	Rosiclair sand, McClosky lime, L. Miss.	2858	-2858	F 748	..
Woodlawn	Jefferson	Duncan & Obering's C. Ragan 1, c ne sw 25-2s-1e	8-18-42	Benoist sand, U. Miss.	2021	2008-2021	P 77	..
Lawrence, South	Lawrence	S. Malis et al's Ireland 1, sw se nw 27-2n-12w	11- 3-42	Bethel sand, U. Miss.	2005	1995-2005	P 70	..
Alma	Marion	Texas Co.'s J. Masanek 1, nw nw sw 36-4n-2e	1-20-42	Bethel sand, U. Miss.	2126	1930-1939	P 15	..
Friendsville	Wabash	Skiles' Smalley 2, c se se ne 3-1s-13w	11-17-42	Cypress sand, U. Miss.	2475	2313-	P 176	..
Friendsville	Wabash	W. E. Bailor's Liddle 3, nw sw sw 26-1n-13w	12-22-42	Biehl sand, Penn.	1771	1759-	P 50	31
Aden	Wayne	Texas Co.'s H. Silverman 5, c ne nw 16-2s-7e	10-20-42	Aux Vases sand, U. Miss.	3340	-3340	P 141	..
Boyleston	Wayne	Gulf's P. Carter 1, c e½ ne sw 2-2s-7e	12- 1-42	Levias lime, L. Miss.	3300	3214-	P 19	38.2
Coil	Wayne	W. C. McBride's S. Gregory 1, c nw nw ne 30-1s-5e	12- 1-42	McClosky lime, L. Miss.	3056	2971-2978	P 4	35
Covington	Wayne	Kewanee O. & G. Co.'s Beck-Samford 1, c nw nw 29-1s-7e	7-21-42	Levias sand, L. Miss.	3225	3209-3225	P 139	..
Covington	Wayne	Gulf's Blackburn-Thomas 3	8-25-42	Rosiclare sand, L. Miss.	3286	3219-3240	P 151	..
Geff	Wayne	Ohio Oil's J. W. Weaver 1, ne sw nw 13-1s-7e	10- 6-42	Aux Vases sand, U. Miss.	3089	3072-3089	P 97	..
Geff	Wayne	Schulte & Wix's Atkinson 2, sw nw se	12- 1-42	McClosky lime, L. Miss.	3250	3234-3250	P 187	36.7
Mt. Erie	Wayne	Pure's S. S. Allen 1, c se se 11-1s-8e	9- 8-42	Rosiclare sand, L. Miss.	3215	3068-	P 9	..
Sims	Wayne	Texas' H. O. Fuhrer 2, sw sw se 28-1s-6e	1-20-42	Aux Vases, Levias & McClosky	3185	-3185	P 30	..
Sims, North	Wayne	Pure's W. L. Reed 1, s se sw 17-1s-6e	3-17-42	Rosiclare sand, L. Miss.	3248	3152-3178	P 243	..
Centerville, East	White	Sun Oil's G. Spencer 1, sw nw sw 8-4s-10e	6-16-42	Bethel sand, U. Miss.	3099	2960-2976	P 64	..
Grayville	White	S. C. Yingling's N. A. Bretz 1, nw se 20-3s-14w	7-14-42	Biehl sand, Penn.	1896	1882-1896	P 144	..
Grayville	White	Skelly's S. Fearn 1, se ne se 19-3s-14w	5-26-42	Biehl sand, Penn.	3096	1836-1842	P 12	..
Grayville	White	Skelly's S. Fearn B-1, se se sw 20-3s-14w	9- 1-42	Biehl sand, Penn.	1882	1873-1882	P 41	..
Maunie	White	H. K. Reynold's E. P. Hubele 1, sw sw 7-6s-11e	5-12-42	Pennsylvanian	1335	-1335	P 58	..
Maunie	White	McElvain's Poole-Parr 3, c ne nw 13-6s-10e	7-14-42	Aux Vases sand, U. Miss.	2855	2843-2855	P 185	..
Maunie	White	McElvain Bros.' Poole-Parr 6-C	9- 8-42	Tar Springs sd, U. Miss.	2856	2191-2203	P 192	..
Phillipstown	White	Jarvis Bros.' K. & E. Spencer Community 1, n sw sw 31-4s-11e	7-21-42	Clore sand, U. Miss.	2034	2019-2034	P 40	..
Phillipstown	White	Jarvis Bros.' Spencer 2, n nw sw 31-4s-11e	6-23-42	Palestine sand, U. Miss.	2120	2052-2059	P 30	..
Roland	White	Kingwood-Sinclair's Hale B-1, w s nw 1-7s-8e	7-28-42	McClosky lime, L. Miss.	3146	2997-3050	P 203	..
Stokes	White	Pure's Pyle Consolidated 2, se sw se 18-6s-9e	12- 8-42	Aux Vases sand, Chester, U. Miss.	2915	2906-2915	P 152	..

Indiana

OIL FIELDS

Somerville	Gibson	Mo-Jo Oil Co.'s Dugan 1, se se nw 35-2s-9w	2- -42	Tar Springs sd, U. Miss.	1074	1067-1074	P 20	..
Grafton	Posey	Carter's Allyn 1, c nw ne 28-6s-14w	4- 8-42	Tar Springs sd, U. Miss.	3010	2136-2145	P 10	36
Half Moon	Posey	Sun's L. C. Byrd 1, c ne se 4-8s-14w	4-20-42	Aux Vases sand, U. Miss.	2653	2608-2621	P 53	..
Hovey Lake	Posey	C. E. Brehm & Sohio Prod. Co.'s Hardwick 1, se se se 12-8s-14w	10-28-42	Pennsylvanian sand	1135	1095-1105	P 24	..
New Haven	Posey	Longhorn Oil Corp.'s Greathouse 2, sw ne ne 18-7s-14w	9- -42	Cypress sand, U. Miss; lime, Devo.	2465	2456-2465 1816-1824	P 185	..
Point	Posey	Sinclair-Wyoming Oil's D. G. Nash 1, sw sw ne 32-7s-14w	3- 4-42	McClosky lime, L. Miss.	2908	2735-2739	P 227	39
Prairie	Posey	Carter's Jas. Baker 1, c sw nw 9-7s-14w	3-20-42	McClosky lime, L. Miss.	2963	2849-2963	262	39
Ridge	Posey	Gulf's Oscar Ries 1, c w½ sw nw 23-7s-14w	8-10-42	McClosky lime, L. Miss.	2742	2737-2742	P 20	..
Stooker	Posey	Paul Rossi's Mauzy 1, ne nw nw 8-7s-12w	4-15-42	Aux Vases sand, U. Miss.	2621	2617-2621	P 265	38.5
Grandview	Spencer	H. H. Vickers' Stewart 1, nw sw sw 27-6s-5w	2- -42	Cypress sand, U. Miss.	888	881-888	P 15	..
Eureka	Spencer	Miller & Shiarella's Ruth Locker 1, nw sw nw 34-7s-7w	8-21-42	McClosky lime, M. Miss.	1674	1652-1654	P 80	38

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HOUSTON

DISCOVERY WELLS OF NEW FIELDS AND NEW PAY ZONES OPENED IN U. S. IN 1942

For explanation of data in "Initial Production" and "Producing Formation" columns—see note at beginning of tables, page 97.

Indiana—Continued

NEW OIL PAY

Field	County	COMPANY, WELL AND LOCATION	Date Completed	Name, Character and Age of Producing Formation	Total Depth (Feet)	Completion Horizon (Feet)	Initial Production, Method, and Choke	Gravity of Oil
Mt. Vernon	Posey	Carter's and Gulf's O. Erwin 1, ne nw ne 1-7s-14w	1- -42	Mansfield sand	1300	1274-1300	390	..
Vernon Heights	Posey	Sells Pet. Co.'s J. A. McCarthy 1, ne sw nw 32-6s-11w	.....	Waltersburg sand, U. Miss.	1736	1718-1736	P 170	..
Dodds Bridge	Sullivan	Ohio Oil Co.'s Albert Poe 1, ne ne sw 3-8n-10w	6-25-42	Devonian-Silurian lime	2386	2337-2352 2373-2386	F 77	46

Kansas

OIL FIELDS

Bear Creek	Barber	Great Lakes Carbon's Welsh 1, nw sw se 30-31-15w	12-21-42	Douglas sand, Penn.	4249	4199-4249	P 50	..
Kraft-Prusa, SE.	Barton	Auto-Ordnance's Disque 1-A, nec 23-17-11w	4-26-42	Arbuckle Dolomite; Ord.	3320	3311-3320	P 307	41
So. Lake City	Barber	Deep Rock's Skinner 1, cw½ nw sw 21-31-14w	1- 4-42	Arbuckle lime; Ord.	4780	3774-3780	P 41	31
Beaver, NW	Barton	N. Appleman's Stull 1, cs½ se sw 6-16-12w	11- 1-42	K. C.-Lans. lime; Penn.	3331	3040-3074	F 408	..
Boyd (Revived)	Barton	Phillips Pet. Co.'s Frieb 1, sec sw 33-17-14w	11-12-42	Arbuckle lime; Ord.	3451	3441-3451	P 47	37
Davidson	Barton	H. H. Balir's Peirano 1-B, cn½ nw nw 3-16-11	2-11-42	Lansing lime; Penn.	3062	2970-3044	P 614	42
Eberhardt	Barton	C. E. Ash & Crown's Roth 1, cn½ ne ne 25-19-11w	2-11-42	Arbuckle dolo., Ord.	3334	3316-3333	P 343	..
Kowalsky	Barton	Sinclair-Prairie's Kowalsky 1, cn½ ne sw 32-20-11w	1-10-42	Arbuckle lime; Ord.	3408	3377-3391	P 154	45
Kraft-Prusa, NE	Barton	J. J. Lynn's Kraft 1, cs½ se nw 36-16-11w	1-14-42	Arbuckle lime, Ord.	3370	3356-3370	P 544	42
Merten	Barton	Helmerich & Payne's Merten 1, nw nw ne 10-19-15w	6-10-42	LaMotte sand, Cam.	3578	3551-3565	P 168	35
Mue-Tam	Barton	Lario O. & G. Co.'s Muller 1-A, CN½ se ne 35-20-11w	6- 8-42	Arbuckle lime, Ord.	3335	3304-3335	P 354	..
.....	Barton	Mid-Cont. Pet. and T. Palmer's Harrison 1, nwc ne 18-20-13w	12-30-42	Arbuckle lime, Ord.	3534	3528-3534	P 51	36
Dunn's Mill	Butler	Deep Rock Oil's Eckels 1, cse nw 32-29-4e	11-27-42	Arbuckle lime, Ord.	2956	2951-2956	P 63	33
.....	Butler	C. H. Pechin's Dixon 1-A, cnw sw 12-27-6e	5- 1-42	K. C. Lans. lime, Penn.	2161	2152-2161	P 40	..
.....	Butler	J. J. Lunn's Vandenberg 1, sw se nw, 35-27-6e	.....	K. C. Lans. lime, Penn.	2131	2118-2131	P 45	..
Deichmann	Cowley	Trees Oil's Deichmann 1, nw nw sw 24-31-4e	1- 3-42	Bartlesville sand, Penn.	2845	2835-2845	F 795	43
Henderson	Cowley	E. Wakefield's Henderson 1, cn½ nw nw 26-32-3e	5- 6-42	K. C. Lans. lime, Penn.	3462	2680-2704	P 24	39
Krawse, NW	Ellis	Pryor & Lockhart's Krawse 1-A, ce½ se sw 17-14-19w	10- 2-42	Gorham sand, sub-Ord.	3805	3798-3805	P 350	..
Heiken, No.	Ellsworth	N. Appleman's Stratman 1, n½ nw nw 24-17-10w	2-25-42	Arbuckle lime, Ord.	3218	3216-3218	P 231	..
Wilkins, S. E.	Ellsworth	Mid-Balins' Alden 1, cn½ ne se 32-17-9w	7-10-42	Arbuckle lime, Ord.	3233	3218-3233	F 3000	..
.....	Greenwood	LeBlanc's Shell 1, cnw sw 8-27-12e	5-27-42	Mississippi lime, Miss.	1649	1645-1649	P 10	25
Stuckey	Harvey	H. M. Williams' Stuckey 1, cne nw 3-23-4w	12- 2-42	Mississippi lime, Miss.	3277	3213-3277	F 9	..
Crowther	McPherson	Westgate-Greenland's Crowther 1, cs½ nw nw 26-17-1w	9-30-42	Mississippi lime, Miss.	3422	2778-2794	P 151	..
Lindsborg, SW	McPherson	Falcon-Seaboard and Globe's Bean 1, cw½ se sw 25-17-4w	11- 4-42	Viola lime, Ord.	3406	3401-3406	F 3000	..
Roxbury, So.	McPherson	Westgate-Greenland's Lilly 1, cs½ sw se 30-17-1w	10- 7-42	Mississippi chat, Miss.	2668	2656-2668	P 3000	..
Lost Springs, E.	Marion	Veeder Supply's Williams 1, cn½ nw 35-17-4e	2-18-42	Mississippi lime, Miss.	2382	2337-2382	P 50	35
Zook	Pawnee	Stanolind's R. Smith 1, cn½ se se 16-23-16w	3-18-42	Arbuckle lime, Ord.	4150	4138-4150	F 71	36
Carmi	Pratt	Hollow Drlg. Co.'s 1-B Brown, sw se se 29-26-12w	12-28-42	Arbuckle lime, Ord.	4289	4268-4289	SWB 42	..
.....	Pratt	Hannum Drlg.'s Beck 1, sw sw sw 6-27-12w	6-20-42	Simpson sand, Ord.	4250	4081-4250	F 684	..
Morton	Reno	Cities Service's Morton 1, sw sw ne 17-24-8w	3- 4-42	Lansing lime, Penn.	3910	3402-3450	P 185	32
S.W. Peace Creek	Reno	Simpson Oil's Souder 1, sw ne ne 32-23-10w	6- 3-42	Viola lime, Ord.	3731	3671-3730	F 1106	40
Schweizer	Reno	Hinkle Oil & Cent. Pet.'s Schweizer 1, se se nw 31-22-9w	2- 8-42	Simpson & Viola Cherty-dolomite; Ord.	3725	3723-3725	P 774	42
Pioneer	Rice	Harwood's Proffitt 1, ne ne nw 25-19-10w	9-23-42	Arbuckle lime, Ord.	3284	3280-3284	F 280	40
Smyres	Rice	Nelson Drlg's Smyres 1, ne ne sw 36-19-6w	1-29-42	Mississippi chat, Miss.	3355	3323-3354	F 3000	38
Baum	Rooks	Palmer's Baum 1, cs½ nw ne 10-10-16w	4- 8-42	Lansing lime; Penn.	3540	3057-3092	P 210	38
Dorr	Rooks	Cities Service's Dorr 1, ne nw ne 20-9s-16w	9- 9-42	K.C.Lansinglime; Penn.	3504	3188-3205	P 125	35
Ray, S.E.	Rooks	Derby Oil & Crow Drlg.'s Steele 1, cn½ nw nw 9-6s-20w	1-28-42	Basal sand, Cambrian	3639	3613-3639	P 183	30
.....	Rooks	Continental's Berry 1, ne ne ne 11-9-19w	10- 7-42	Arbuckle lime, Ord.	3456	3431-3456	P 3000	28
Russell, No.	Russell	Aylward Pet.'s Ehrich 1, sw sw nw 15-13-14w	10- 9-42	K.C.Lansinglime, Penn.	3294	2978-3002	P 430	38
Witt	Russell	A. H. Witt's Fee 1, sw sw ne 3-14-14w	8- 8-42	K.C.Lansinglime, Penn.	3011	3000-3009	P 429	..
Curtis	Stafford	Vickers Pet.'s Curtis 1, s½ sw nw 6-22-13w	11-11-42	Arbuckle lime, Ord.	3700	3693-3700	F 3000	30
Hazel	Stafford	W. P. Faulkner's Ward 1, cse sw 21-21-13w	7- 2-42	Arbuckle lime, Ord.	3703	3692-3703	F 2400	38
Nernon, No.	Sumner	E. B. Shawver's Kemp 1, se se se 8-35s-2e	1-14-42	Mississippi lime, Miss.	3393	3388-3393	P 30	39

KANSAS: NEW GAS FIELDS

Deerhead	Barber	Champlin Ref.'s Hildebrand 1, ce½ ne nw 26-32-15w	3-18-42	Viola & Upper Simpson, sandy lime, Ord.	5323	4925-4940	F 14-mil.	gas
Belpre	Edwards	Cities Service Oil's English 1, ne ne ne 8-25-16w	10-27-42	Lansing lime, Penn.	4617	3807-3815	F 25-mil	gas
Hugoton	Finney	Kans. & Nebr. P. L.'s Layman 1, c 3-24-34w	8-14-42	Ft. Riley lime, Perm.	2733	2623-2733	F 2-mil.	gas
Ackerland	Jefferson	Mosbacher's Bell 1, cnw se 1-10-20e	6-17-42	Bartlesville sand, Penn.	1368	1343-1368	F 5.8-mil	gas

KANSAS: NEW OIL PAYS

Lake City	Barber	Pryor & Lockhart's Gant 2, cn½ ne 18-31-13w	1-28-42	Simpson sand, Ord.	4531	-4531	343	..
Ainsworth	Barton	Continental Oil's Underwood 3, nw sw ne 10-17-13w	3-30-42	Lansing K.C. lime, Penn.	3189	3181-3189	338	..
Henderson	Cowley	Earl Wakefield's Campbell 1, se se 22-32-3e	9-23-42	Arbuckle lime, Ord.	3423	3419-3423	123	..
Lindsborg	McPherson	Auto Ordnance Co.'s Johnson 1, sw ne 8-17-3w	7-27-42	Simpson sand, Ord.	3460	3451-3460	2247	..
Gustason	Russell	Stanolind's Kostrup 1, ne ne se 15-15-12w	8-26-42	Lansing K.C. lime, Penn.	3175	2916-3175	670	..

KANSAS: NEW GAS PAYS

Whelan	Barber	Great Lakes Carbon's lease 1, cnw se 31-31-11w	5-16-42	Elgin sand, Penn.	3323	3313-3323	4-mil	gas

Kentucky

OIL FIELDS

Smith Mills	Henderson	Cherry and Kidd's Burbank 1, 24-Q-21, 2½ mi nw Smith Mills	8- -42	McClosky lime, L. Miss.	2683	2674-2683	144	..
Uniontown	Union	Sun Oil Co.'s Highland Creek 1, sw 16-P	11- -42	Waltersburgh sand, U. Miss.	2653	1822-1845	486	..
Wabash Island	Union	Robert O'Meara's N. J. Waller 1, 12-P-18	10- -42	Aux Vases sand, U. Miss.	2718	2611-2623	85	..
Wathen	Union	Whatley and Lindas Kington Coal Co.'s 1-O-19	6- -42	Waltersburgh sand, U. Miss.	1789	1774-1789	151	..

KENTUCKY: NEW OIL PAYS

.....	Henderson	Farm Bureau Oil Co.'s Burbank 1, 24-Q-21	10- -42	Cypress sand, U. Miss.	2316	2303-2316	792	..
.....	Union	Phillips Pet. Co.'s Kington 1, 1-O-19	8- -42	McClosky lime, L. Miss.	2610	2602-2610	60	..

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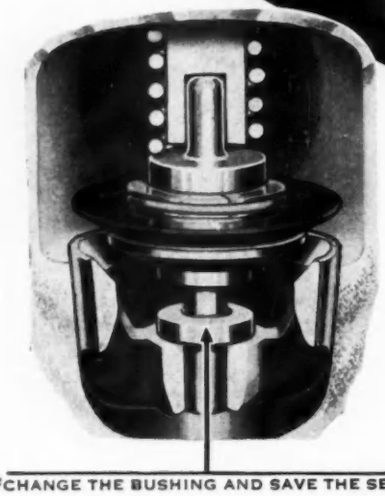

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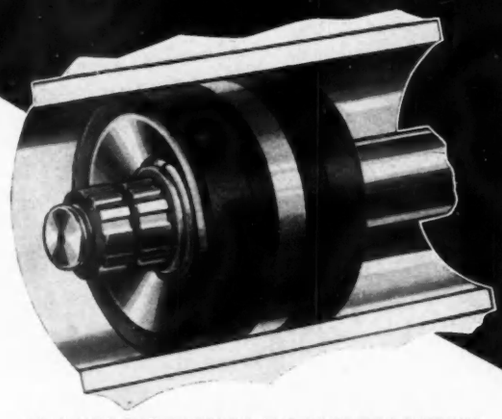

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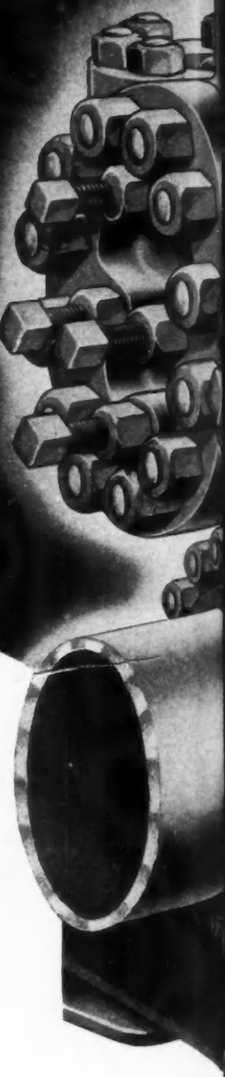

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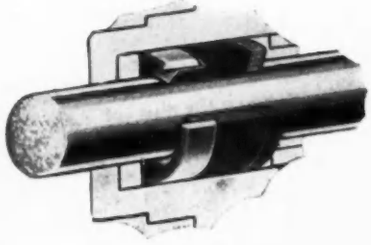

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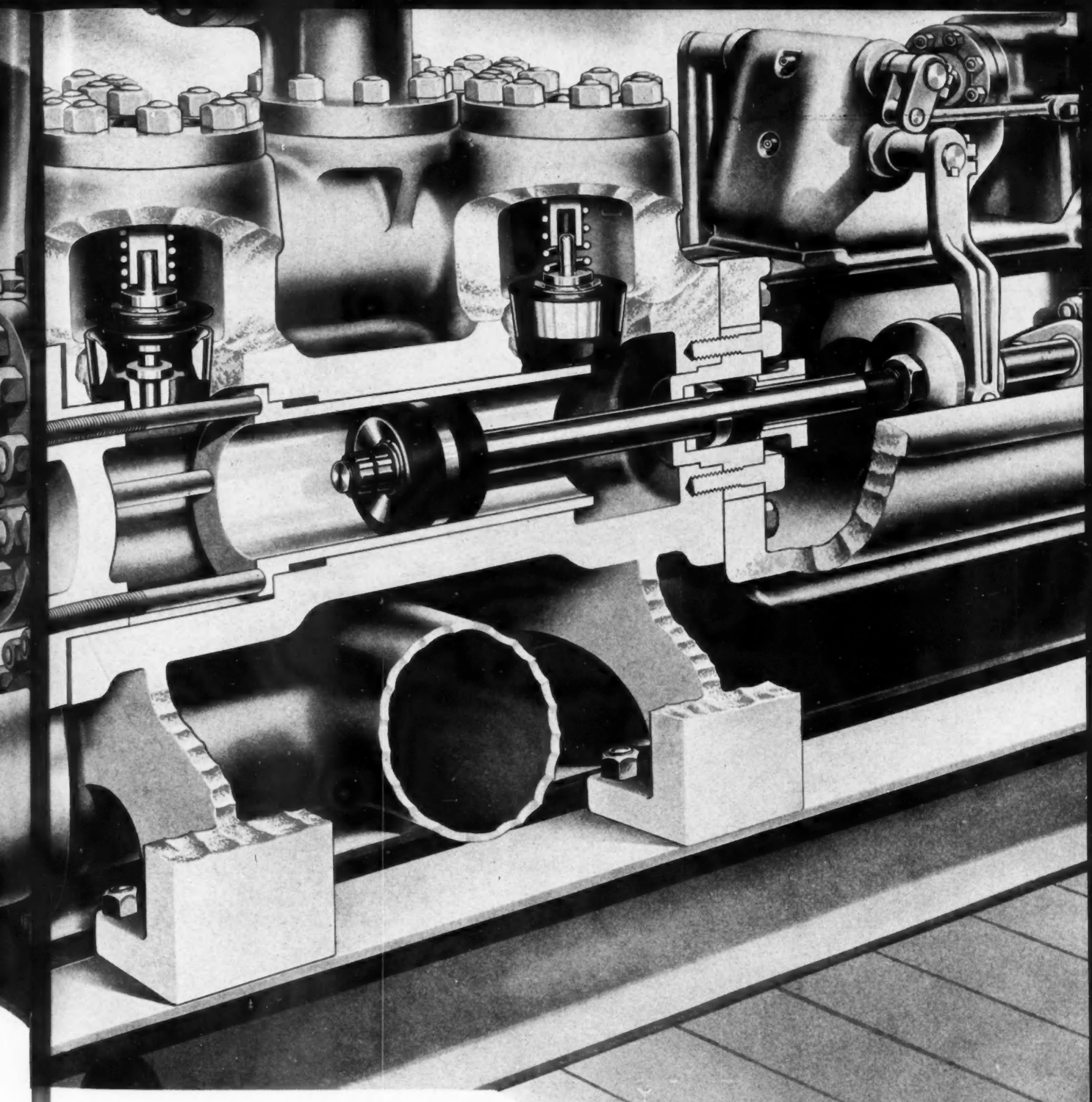

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DISCOVERY WELLS OF NEW FIELDS AND NEW PAY ZONES OPENED IN U. S. IN 1942

For explanation of data in "Initial Production" and "Producing Formation" columns—see note at beginning of tables, page 97.

North Louisiana

OIL FIELDS

Field	County	COMPANY, WELL AND LOCATION	Date Completed	Name, Character and Age of Producing Formation	Total Depth (Feet)	Completion Horizon (Feet)	Initial Production, Method, and Choke	Gravity of Oil
Carterville, No.	Bossier	H. L. Hunt's Nebo Oil Co. 1, sw se 3-23n-12w	11– –42	Pettit li, L. Glen Rose, L. Cret.	6386	6029–	F 230; 1/4"	38
Manifest	Catahoula	Eugene Jordan's La. Central 1, c ne se 22-9n-5e	11– –42	Sparta sand, Eocene	4554	1810–1817	P 72	19
Lake St. John	Concordia	California Co.'s Pan American 1, nw 16-9n-10e	6– –42	Wilcox sand, Eocene	9997	4567–4571	F 136; 11/41"	44
Catahoula Lake	La Salle	Carter Oil Co.'s Catahoula A-1, c sw nw 5-6n-4e	4– –42	Wilcox sand, Eocene	5492	4089–4092	157	36.5
Elm Ridge	La Salle	Carter's and Phillips' Tensas Delta A-2, se sw 25-6n-4e	10– –42	Wilcox sand, Eocene	5976	4572–4575	201	42.5
Indian Bayou	La Salle	Carter's and Phillips' Tensas Delta D-1, se sw 25-6n-3e	1– –42	Wilcox sand, Eocene	5905	4294–4298	144	43.6

NORTH LOUISIANA: GAS FIELD

Unnamed	Concordia	E. C. Johnston's F. D. Brown 1, e½ 4-9n-10e, 1 mi ne Lake St. John field	10– –42	Sparta sand, Eocene	5050	2170–2180	26 mil	gas

NORTH LOUISIANA: DISTILLATE FIELDS

Beekman	Morehouse	Union Prod. Co.'s Crossett Lbr. Co. A-1, c sw ne 6-22n-6e	8– –42	Cotton Valley sd, Jur.	6956	3700–3711	25 bbl, 1.2 gas	47
Calvin	Winn	Hunt Oil Co.'s Goodpine F-24, sw se 12-12n-5w	10– –42	Paluxy sand, L. Cret.	9720	5784–5794	317 bbls, 9.5 gas; 1/4"	..

South Louisiana

OIL FIELDS

Hayes	Calcasieu	Gulf's Calcasieu Nat'l Bank 2, se sw 18-11s-5w	5– 2–42	Sand, Miocene	11685	11646–11670	F 55; 1/16" & 4 mil	48
Avery Island	Iberia	Humble's Petit Anse 2, 2334 ft n & 1197 ft e of sw c 25-13s-5e	8– 3–42	Sand, Miocene	9242	8994–9002	F 288; 1/32"	31.5
Bay de Chene	Jefferson	Texas Co.'s LaFourche Basin Levee Dist. 2-B, 3055 ft n & 1198 ft e of nw c 31-19s-24e	3–19–42	Sand, Miocene	9887	7470–7500	F 325; 1/4"	..
Bayou Couba	St. Charles	Gulf's Delta Securities 1, 3400 ft s & 1980 ft w of ne c 13-15s-21e	9–19–42	Sand, Miocene	6917	6536–6542	F 196; 2/64"	36.1
Lake Decade	Terrebonne	Superior Oil Co.'s LaTerre Land 1, 1980 ft n & 660 ft e of sw c 27-19s-15e	7– 7–42	Sand, Miocene	13417	10187–	F 454; 11/64"	34.5

SOUTH LOUISIANA: GAS FIELDS

Bully Camp	Lafourche	Gulf's Delta Securities 1, 82 ft w & 331 ft s of ne c 1-19s-20e	11–11–42	Sand, Miocene	1496	994–	0.75 mil	gas
Deer Island	Terrebonne	Humble's Continental Land & Fur 2, sec 24-18s-12e	9–29–42	Sand, Miocene	11470	9565–9570	No gauge	gas

SOUTH LOUISIANA: DISTILLATE FIELDS

Branch	Acadia	Union Sulphur Co.'s J. P. Gueno Est. 1, go s 35 deg 45 mins e 3000 ft & s 54 deg 15 mins w 660 ft fr ne c 51-8s-2e	12– –42	Sand, Miocene	10447	10410–10447	F 2400, no ch.	51
Thornwell	Jefferson Davis	Cities Service's Lacassine Ld. Co. 1, 660 ft s & e of nw c 35-11s-5w	3–14–42	Sand, Olig.	10325	9638–9644	F 100; 1/16"	dist
Krotz Springs	St. Landry	Gulf's Haas-Hirsch 1, 3008 ft s & 1883 ft e nw c 21-6s-7e—3000 ac blk	12– –42	Sand, Miocene	11398	9217–9220	& 12 mil F 204; Var. chs.	dist
Fresh Water Bayou	Vermilion	Union of Calif's La. Furs 1-C, se nw s 33-16s-2e	11–30–42	Sand, basal Mio.	11985	11120–	F; no gauge	dist.

SOUTH LOUISIANA: NEW OIL PAYS

Neale	Beauregard	Atlantic's Hawkins Unit 1, c ne se 27-3s-11w	2–14–42	Wilcox sand, Eoc.	12575	11532–11574	F 174; 1/16"	50.7
Starks	Calcasieu	W. T. Burton's Lutcher-Moore 5, 1779 ft e & 707 ft s of nw c 19-9s-12w	5–19–42	Sand, Miocene	5539	5344–5356	F 274; 2/32"	35.5
Vinton	Calcasieu	Union of Calif.'s M. Gray 3-G, 1630 ft fr e & 3785 ft fr sl 33-10s-12w	11–27–42	Sand, Miocene	5360	4908–4914	F 127; 1/8"	..
University	E. Baton Rouge	Helis' Duplantier 9-A, 1000 ft n 81 deg 48 min w, th 1050 ft s 8 deg 12 min e fr ne c 65-7s-1w	7– 7–42	Sand, Miocene	10190	9720–9724	F 129; 1/8"	..
University	E. Baton Rouge	Sugarfield Oil's Richard Com. 4, 835 ft n 28 deg e & 107 ft n 62 deg w fr se c 45-7s-1e	5–12–42	Sand, Miocene	9696	9400–9403	F 229; 2/64"	40.4
Pine Prairie	Evangeline	E. J. Nicklos' Jesse Reed 2, 899 ft n & 200 ft w se c 36-3s-1w	2–14–42	Cockfield sand, Eoc.	7815	7780–7792	F 794; 1/4"	41.6
Pine Prairie	Evangeline	Texas Co.'s LaDanois Land Co. 2-B, 1620 ft e & 700 ft n of sw c 35-3s-1w	7– 7–42	Sparta sand, Eoc.	9490	9447–9470	F 235; 1/8"	..
W. Mermentau	Jeff Davis	H. M. Naylor Oil Co.'s Acadia Dev. Co. 2, s 62 deg 15 min e 4388 ft, th n 27 deg 45 mins e 1980 fr sw c 40-10s-2w	7–15–42	Heterostegina sd, Olig.	10581	10198–10206	F 243; 1/8"	45.7
Anse la Butte	Lafayette	Stanolind's Nickerson 1, 1924 ft sw alg sel sec 43, th 890 ft nw at r/a in 43-9s-5e	7–20–42	Sand, Miocene	9940	9782–9818	F 310; 1/4"	30.5
Leeville	LaFourche	Texas Co.'s LLE-Leeville 85, 4566 ft & 1232 ft n of se c ne 27-21s-22e	1–15–42	Sand, Miocene	9080	8475–8495	F 178; 1/8"	..
Leeville	LaFourche	Texas Co.'s LLE-Leeville 86, 4018 ft s & 3878 ft w ne c se 27-21s-22e, in 34-21s-22e	4– 4–42	Sand, Miocene	10093	10078–10085	F 235; 1/4"	29
Potash	Plaquemines	Humble's Orleans Levee Board 57, begin ne cor sec 14 go 3620 ft alg nl th at ra 33 ft in 14-18s-15e	2–22–42	Sand, Miocene	8763	8707–8740	F 430; 1/16"	..
Bayou des Allemands	St. Charles	Amerada's T. B. Sellers 1,2506 ft s & 4911 ft e nw c 14-15s-20e	1–13–42	Sand, Miocene	10334	5624–5638	F 121; 1/8"	32.2
Paradis	St. Charles	Humble's Mfgrs. Record 3, 1980 ft e 660 ft s of nw c 18-14s-20e	6– 4–42	Sand, Miocene	11240	11120–11123	F 456; 1/16"	35.1
Lewisburg	St. Landry	Stanolind's Dohmann 1, 660 ft n & e of sw c se se 8-7s-3e	6– 7–42	Sand, Oligocene	10872	9090–9105	F 83; 1/4"	53.1
Port Barre	St. Landry	Helis' S. W. Futral 2, 7014 ft n 8 deg 28 mins e & 796 ft s 82 deg e fr sw c 29-6s-5e	3–24–42	Sand, Oligocene	6894	6662–6680	F 149; 1/8"	39.7
Lake Chicot	St. Martin	Amerada's Schwing-Case 1, 660 ft s & e of nw c 31-11s-10e	3–10–42	Sand, Miocene	11620	10340–10344	F 157; 2/32"	35.8
Bayou Sale	St. Mary	Humble's Wooster 3-B, 1960 ft at r/a in 16-16s-9e	2–11–42	Sand, Miocene	11800	4550–	F 48; 1/4"	38.8
Charenton	St. Mary	Fifteen Oil Co.'s South Coast Corp. 2, 1290 ft s & 543 ft e of nw c ne 31-13s-10e	3– 8–42	Sand, Miocene	10032	9232–9240	F 245; 1/16"	34
Lake Pelto	Terrebonne	Texas Co.'s State-Lake Pelto 38, 3241 ft s & 4627 ft e of nw c 20 in 29-23s-18e	4–19–42	Sand, Miocene	11478	11410–11420	F 324; 2/32"	35
East White Lake	Vermilion	Union of Calif.'s Vermilion Par. Sch. Bd. 3-A, sec 16-15s-1e, e side fld	4–15–42	Sand, Miocene	6440	5964–5982	F 152; 2/32"	36.5
Whitelake	Vermilion	Union of Calif.'s La. Furs 6-A, Start nw cor sec 15, go 00 deg 34 mins w 3300 ft, th s 89 deg 25 mins e 510 ft to lcn in 15-15s-1e	12–12–42	Sand, Miocene	8561	6808–6813	F 192; 2/64"	36.9
West Gueydan	Vermilion	Pure's Vermilion Irrig. Co. 2, 1980 ft w & 660 ft n of se c 41-12s-2w	5–15–42	Sand, Miocene	11000	10782–10792	F 258; 1/4"	34.9
West Gueydan	Vermilion	Magnolia's Ferguson 5, 660 ft s & 2035 ft w of ne c 5-12s-2w	9– 3–42	Sand, Miocene	10844	10792–10802	F 217; 2/64"	38.9

SOUTH LOUISIANA: NEW GAS PAYS

Lockport	Calcasieu	Magnolia's Farquhar Unit 1, 733 ft n & 594 ft w of se c ne 8-10s-9w	12– 3–42	Sand, Pliocene	8178	3193–3195	1.7 mil	gas
Rabbit Island	Iberia	Texas Co.'s State-Rabbit Island 3, begin USCGS Monument "Island" in Atchafalaya Bay, go s 1 deg 47 mins e 34,817 ft in bay	6– 8–42	Sand, Miocene	9348	8668–8715	F 5 mil	gas

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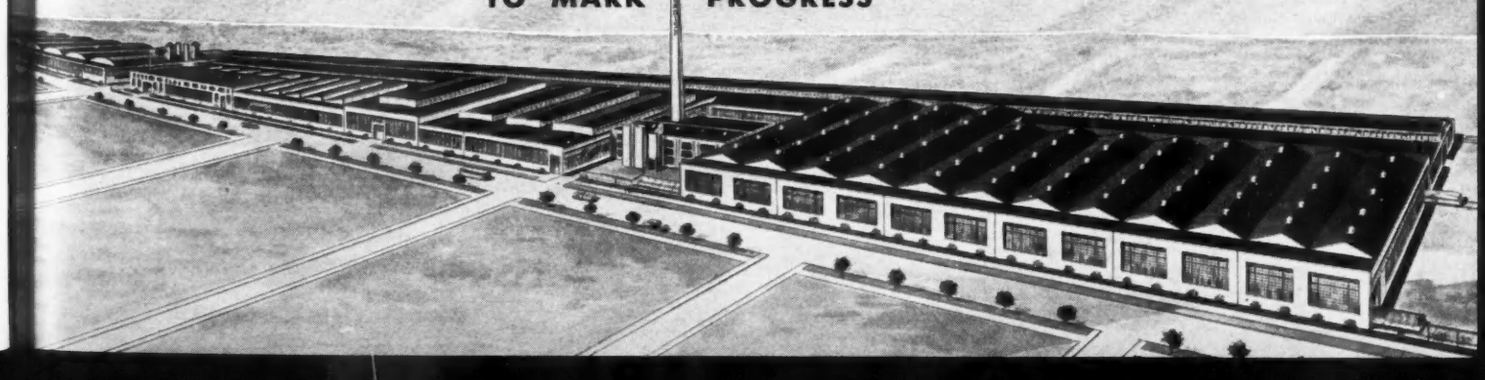

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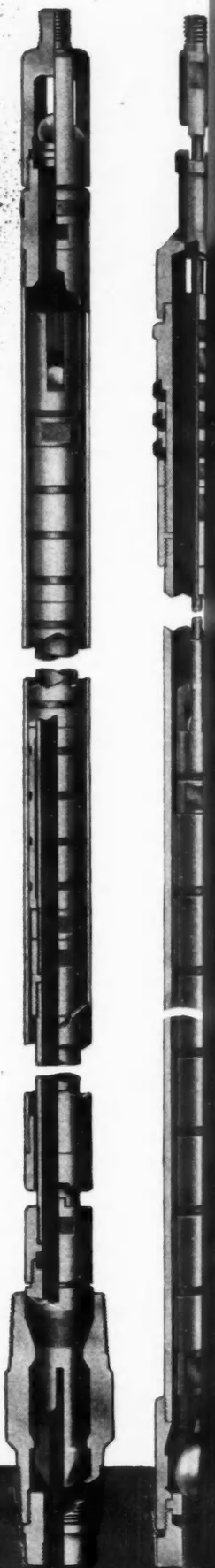

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For explanation of data in "Initial Production" and "Producing Formation" columns—see note at beginning of tables, page 97.

Michigan

OIL FIELDS

Field	County	COMPANY, WELL AND LOCATION	Date Completed	Name, Character and Age of Producing Formation	Total Depth (Feet)	Completion Horizon (Feet)	Initial Production, Method, and Choke	Gravity of Oil
Allegan	Allegan	Bridger Basin's Butcher 1, nw ne nw 26-2n-13w	6-26-42	Traverse lime, Devo.	1510	1510	P 20	38.0
Dallas	Clinton	J. B. Spitzley, Tr.'s Simon 1, nw se se 21-7n-4w	5- 5-42	Traverse lime, Devo.	2500	2481-2500	P & F 71	38.8
Pine River	Gratiot	Chartiers Oil Co.'s Church 1, ne se ne 31-12n-3w	8-26-42	Dundee lime, Devo.	3284	3283-3284	F 43	44.0
Sauble	Lake	W. P. Shoemaker's Matson 1, ne se nw 16-19n-14w	3-25-42	Traverse lime, Devo.	2114	2111-2114	F 230	35.2
Fork	Mecosta	Sun's Murray 1, s½ nw sw 5-16n-7w	9- 7-42	Dundee dolomite, Devo	3818	3816-3818	F 519; 1/8"	49.1
Aetna	Missaukee	Gordon Oil Co.'s Blue 1, s½ se se 26-22n-6w	10-18-42	Dundee dolomite, Devo	3844	3835-3840	P 265	43.2
Norwich	Missaukee	Sun's Horner 2, s½ sw sw 11-24n-5w	8-12-42	Monroe dolomite, Devo.	4437	4400	P 18	44.0
Riverside	Missaukee	Turner Pet. Corp.'s Cavanagh 1, n½ se nw 14-21n-7w	5- 7-42	Dundee dolomite, Devo.	3945	3940-3945	F 490; 1/4"	43.9
Evart	Osceola	Sun's Arndt 1, n½ sw sw 23-18n-8w	5- 6-42	Dundee dolomite, Devo.	3778	3767-3778	F 400; acid	44.6
Polkton	Ottawa	Associated Pet Co.'s Blacmer 1, ne se ne 15-8n-14w	3-20-42	Traverse lime, Devo.	1890	1877-1890	P 14	41
South Zeeland	Ottawa	D. M. Leonard's Nykamp 1, se sw se 30-5n-14w	6-22-42	Traverse lime, Devo.	1540	1536	P 40	40.0
North Bangor	Van Buren	Fisher-McCall Inc.'s Davis 1, sec sw se ne 9-2s-16w	10-10-42	Traverse lime, Devo.	1018	1017-1018	P 119	28.3
Wayne	Wayne	Sumpter O. & G. Co.'s DeRoy 1, s½ sw se 22-4s-8e	6- 1-42	Trenton lime, Ord.	2564	2555	P 10	..

MICHIGAN: GAS FIELD

North Adams	Arenac	Don R. Rayburn's Mee 1, c nw nw 4-19n-3e	11-20-42	Berea sandy lime, Miss.	1640	1600	0.6 mil	gas
Fork	Mecosta	Belvidere Oil Co.'s State 1, c nw 11-16n-7w	12-22-42	Stray sand, Miss.	1489	1484	1 mil	gas

MICHIGAN: NEW OIL PAYS

Adams	Arenac	Ervin Major's Adams 1, ne ne ne 36-19n-3e	3-29-42	Sylvania dolomite, Devo.	4229	4207	F 165	40
Winterfield	Clare	Pure's McClain 1, e½ se se 30-20n-6w	9-15-42	Sylvania dolomite, Devo.	5100	5015	F 360; 3/8"	45
Norwich	Missaukee	Sun's Horner 3, s½ ne nw 14-24n-5w	12- 1-42	Dundee lime, Devo.	3096	3082-3090	S 33 ; acid	41
Headquarters	Roscommon	Sun's State A-2, n½ nw sw 33-21n-3w	6- 9-42	Detroit River dolomite, Devo.	4970	4950	F 32	43

Mississippi

OIL FIELD

.....	Clarke	†Irion Drlg. Co.'s Long Bell 1, sw se sw 10-2n-16e	12- -42	Eutaw sand	3679	3679	P 125	..

† Report soon after completion stated that well had sanded up.

Montana

OIL FIELDS

Twin Rivers	Glacier	Ed Reagan's Tribal 194, c nw ne 27-37n-7w	10-24-42	Madison lime, Miss.	3906	3816-3889	F 96	32
Nose	Pondera	R. C. Tarrant's de Staffany 1, c nw ne 30-28n-1w	10-26-42	Sunburst sand	1746	1725-1745	P 12	43
Midway								

MONTANA: GAS FIELDS

Conrad Butte	Pondera	R. C. Tarrant's McCracken 1, c se nw 12-29n-1w	11- -42	Colorado shale	755	-755	0.05 mil	gas
Apex	Toole	A. A. Oil Co.'s Fey 1, sw se se 32-37-2e	8- -42	Stray sands in Colorado shale	1552	1500-1552	2 mil	ga

New Mexico

OIL FIELDS

.....	Chaves	Effie L. Brown's State 1, e se nw 26-10s-26e	5- 5-42	Permian	1700	760-770	P 2	..
Russell	Eddy	Neil H. Wills' Wills 1 c nw sw 13-20s-28e	3-31-42	Yates sand, Perm.	906	786-806	P 26	36
.....	Eddy	Yates & Stroup's State 1, c sw nw 16-19s-30e	12- -42	Permian	.....	.....	P 20	23.5
Vandagriff	Eddy	Culbertson-Irwin, Inc. et al's Vandagriff 1, c sw ne 6-19s-31e	7-24-42	Sandy lime, Perm.	3570	3325-3335	P 42	..
East Lusk	Lea	Culbertson-Irwin, Inc.-Southern Cal. Pet. Corp.'s Lynch-Texaco 1, c sw sw 21-19s-32e	1-24-42	Lime, Perm	2751	2740-2751	P 198	24
East Maljamar	Lea	Phillips' State-Philmex 1, c nw nw 28-17s-33e	4- 1-42	Permian	4771	4484-4600	P 25	..

NEW MEXICO: GAS FIELDS

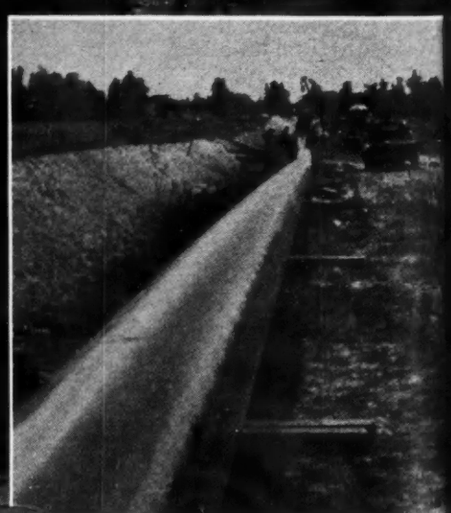
Barker Dome	San Juan	So. Union Prod. Co.'s Barker-Ute1, 613 ft fr n & 1078 ft fr w ls 21-32n-14w	1- -42	Dakota, U. Cret.	2495	2398-2495	11.3 mil	gas
Navajo	San Juan	U. S. Bureau of Mines-Conoco's Navajo 1, c ne sw 13-29n-19w	10- -42	L. Magdalena sandy li, Penn.	6960	6900-6960	.....	gas

Oklahoma

NEW FIELDS

Ardmore	Carter	Lloyd Nobles' Jolliff 1, ne nw nw 24-5s-1e	10-27-42	Springer sand, Perm.	3302	3079-3302	F 349	39
Caddo, Deep	Carter	Pure's Fraser 1, sw ne sw 26-3s-1e	8-12-42	Simpson sand, Ord.	5438	5412-5438	F 1885	38
Hickory Grove	Creek	D. B. Malernee's Rountree 1, sw nw sw 2-14-7e	2-24-42	Bartlesville sand, Penn.	3130	3119-3130	F 998	47
Olive	Creek	Crosbie's Dailey 1, se ne nw 12-18-7e	6- 9-42	Skinner sand, Penn.	2694	2648-2672	P 22	36
Pauls Valley	Garvin	Pure's Teter 1, se sw nw 31-4n-1e	4-17-42	Simpson sand, Ord.	3906	3900-3906	F 2400	42.5
.....	Kay	Ingling et al's Parker Stone 1, c se se 30-25-1e	8- 3-42	Layton sand, Penn.	3296	3277-3252	P 25	..
Crescent, So.	Logan	Gulf's Pulliam 1, cne ne 20-16-4w	7- 6-42	Layton sand, Penn.	7505	5224-5250	F 58	43
Guthrie T'nsite	Logan	Sunray's Welch 1, cnw se 7-16-2w	9- 3-42	Simpson dolomite, Ord.	5893	5600-5656	F 1416	40
Navina, West	Logan	City Service Oil's Babcock 1, se ne ne 10-15-4w	2- 9-42	Layton sand, Penn.	5021	5010-5021	F 1248	42
Aylesworth	Marshall	Pott's Neff-Godfrey 1, ne se 13-6s-6e	9-16-42	Tulip Creek sand, Ord.	3230	3100-3230	P 105	
Liberty	Noble	Deep Rock's Schultz 1, nw sw se 9-22n-2e	6- 2-42	Wilcox sand, Ord.	4597	4502-4550	F 1260	45
Liberty, East	Noble	Deep Rock's Dailey 1, ne nw ne 10-22n-2e	10-31-42	Wilcox sand, Ord.	4378	4369-4378	F 1027	46
Lucine, N'east	Noble	Danciger O. & R.'s Province 1, nw sw 4-20-2w	6-18-42	Wilcox sand, Ord.	5405	5396-5405	F 360	41
Morrison	Noble	E. J. Kubat's Tyer 1, nec sw 7-21n-3e	10-15-42	Mississippi lime, Miss.	4355	4024-4055	P 912	42
North Clearview	Okfuskee	W. C. McBride's Replogle 1, ne nw sw 13-11n-10e	5-23-42	Gilcrease sand, Penn.	4047	2840-2851	F 42	38
.....	Okfuskee	K. G. G. F. et al's Engleman 1, nw ne nw 30-10-10e	4- 6-42	Simpson sdy-dolo., Ord.	3895	3877-3890	P 70	36

Pipe TAPS



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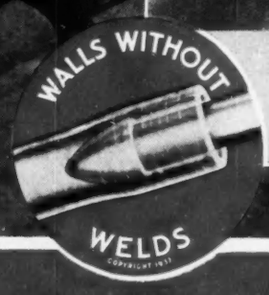

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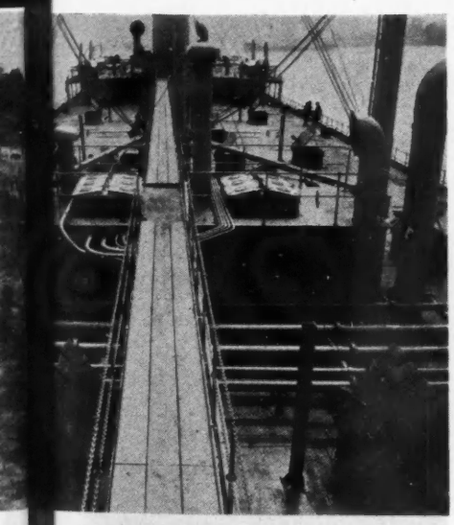
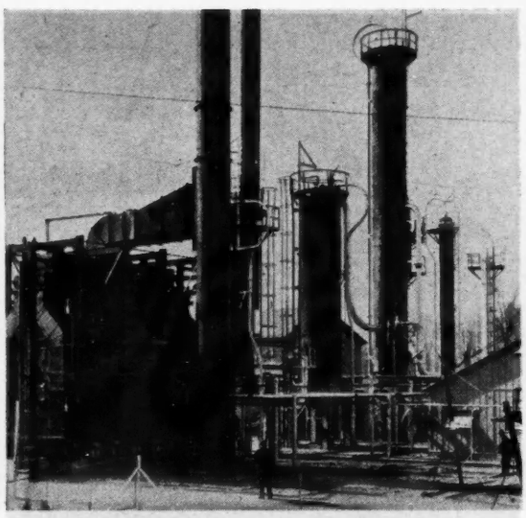
United States Steel Export Company, New York

UNITED STATES STEEL



ANKER REQUIRES. large quantities of and tubing to properly handle its o. In addition, numerous types of pipe required for dozens of other applica- above and below deck.



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NATIONAL SEAMLESS

DISCOVERY WELLS OF NEW FIELDS AND NEW PAY ZONES OPENED IN U. S. IN 1942

For explanation of data in "Initial Production" and "Producing Formation" columns—see note at beginning of tables, page 97.

Oklahoma—Continued

NEW FIELDS

Field	County	COMPANY, WELL AND LOCATION	Date Completed	Name, Character and Age of Producing Formation	Total Depth (Feet)	Completion Horizon (Feet)	Initial Production, Method, and Choke	Gravity of Oil
.....	Okfuskee.....	Mid-Continent's Reed 1, nwc ce 30-12-7e.....	10–22–42	Hunton lime, Devo.....	4556	4250–4259	F 220	38
.....	Okmulgee....	Dake & Hughes' Hensley 1, nw se nw 21-13-9e.....	4–28–42	Dutcher sand, Penn....	3185	3180–3185	P 17	31
.....	Osage.....	Dunn & Miller's Osage 1, se ne ne 36-24-10e.....	7– 9–42	Bartlesville sand, Penn.	1652	1639–1652	P 30	..
Watchorn, East.	Pawnee.....	Alma Oil's Deroin 1, se nw nw 25-23n-3e.....	5– 5–42	Wilcox sand, Ord.....	3891	3880–3891	F 3582	43
Coyle, North..	Payne.....	Portable Drlg. & Phillips' School Ld. 1, sw ne ne 36-18-1e.....	5–19–42	Hunton lime, Devo....	4783	4746–4757	P 94	38
.....	Payne.....	Geo. White's King 1, nw nw ne 6–17–5e.....	4–21–42	Bartlesville sand, Penn.	3660	3620–3651	P 10	..
.....	Payne.....	T. N. Berry's Fee 1, ne se se 12-19-4e.....	8– 4–42	Viola lime, Ord.....	3813	3793–3813	F 175	..
Roper.....	Pontotoc.....	W. A. Delaney's Roper 1, cnw nw 26-5n-5e.....	10–26–42	Viola lime, Ord.....	2552	2460–2552	F 314	38
Brooksville....	Pottawatomie.	Cities Service Oil's Ft. Cobb 1, sw ne ne 4-8n-3e.....	3–24–42	Hunton lime, Devo....	5465	5193–5240	F 1236	33
Centerpoint....	Pottawatomie.	C. W. Sharpe's Wells 1, ne se se 1-9n-2e.....	4–28–42	Simpsonbrkn.dolo.,Ord.	5866	5630–5650	P 223	40
Earlsboro, NW.	Pottawatomie.	Crosbie & Atlantic's Turner 1, ne nw sw 1-9n-4e.....	9– 1–42	Earlsboro sand, Penn...	5405	3849–3854	F 68	35
Macomb.....	Pottawatomie.	Atlantic's Hamil 1, cne sw 27-8n-3e.....	6–22–42	Hunton lime, Devo....	5253	4598–4795	F 5550	33
Rumulus T'nsite	Pottawatomie.	J. F. Smith's DeGroff 1, nw se ne 1-7n-3e.....	6–18–42	Hunton lime, Devo....	4403	4367–4386	P 108	25
Shawnee, NE...	Pottawatomie.	Atlantic Stanolind & Amerada's Whistler 1, nw sw se 18-11-5e.....	10–27–42	Wilcox sand, Ord.....	4853	4835–4853	F 250	33
.....	Pottawatomie.	Mid-Continent's Caldwell 1, nw se nw 1-8n-3e.....	5–26–42	Hunton lime, Devo....	4574	4530–4554	P 14	35
.....	Pottawatomie.	C. J. Bucy et al's Reed 1, ne ne sw 20-8n-4e.....	10– 6–42	Hunton lime, Devo....	4866	4456–4460	P 15	..
.....	Pottawatomie.	Cities Service's Goodin 1, ne sw 23-8-4e.....	12– 1–42	Viola lime, Ord.....	4560	4283–4338	P 50	..
Grayson.....	Seminole.....	C. A. Palmer's Humphrey 1, sw nw ne 15-6n-5e.....	2– 9–42	Fayette sand, Penn....	3230	3210–3230	P 20	40
Grayson, N....	Seminole.....	J. E. Hall's Stockton 1, se ne se 2-6n-5e.....	10– 6–42	Hunton lime, Devo....	4528	4143–4175	P 142	33
Kidd.....	Seminole.....	Mobud Oil's Kidd 2, nw se se 33-10-8e.....	1– 6–42	Sonora sand, Penn.....	2153	2075–2101	P 15	34
Sylvian, N.E...	Seminole.....	Shell's Norvell 1, ne se sw 25-11-7e.....	6– 1–42	Cromwell sand, Penn...	4485	3654–3680	F 68	37
.....	Seminole.....	Kerlyn Oil's Trapp 1, ne se ne 7-8n-7e.....	6–16–42	Dutcher sand, Penn....	4369	3358–3422	P 10	31
.....	Seminole.....	Shell's Patterson 1, sw se se 12-9n-6e.....	9– 1–42	Wilcox sand, Ord.....	4275	4262–4275	F 72	38
Sporn, East....	Simpson.....	Fred Haddock et al's Hert 1, sw ne se 23-17n-3e.....	1–23–42	Simpson sd. & li., Ord.	4547	4530–4540	F 35	55
Velma, No.....	Stephens.....	Gulf's Spears 1, sw sw sw 14-1s-5w.....	10–13–42	Local sand, Penn.....	1945	1875–1945	P 111	36

OKLAHOMA: NEW GAS FIELDS

.....	Caddo.....	Keener O. & G. Co.'s Norton 1, ne ne nw 6-9n-10e.....	1–19–42	Booch sand, Penn.....	3874	2580–2610	F 4-Mil	gas
Elgin.....	Comanche....	Texas Co.'s Roll 1, cse sw 5-3n-10w.....	8–12–42	Wichita-Albany sand, Perm.....	8078	886–974	F 5.6-mil	gas
Agra, East.....	Lincoln.....	Mid-Continent's Bonebrake 1, nw ne 32-17-5e.....	12–21–42	Skinner sand, Penn....	4093	3431–3452	F 26-mil	gas
.....	Lincoln.....	Dunnette Oil's Ashton 1, cne se 3-14-3e.....	9–29–42	Oswego lime, Penn.....	5103	4063–4700	F 4.5-mil	gas
.....	Okfuskee.....	A. J. Peters' Brown 1, se nw ne 7-13n-7e.....	2–16–42	Hunton lime, Devo....	4081	4075–4081	F 28-mil	gas
.....	Okfuskee.....	Summitt Drlg. Co.'s Ruch 1, nw nw sw 14-12n-10e.....	4–14–42	Bartlesville sand, Penn.	3025	1780–1844	F 1.5-mil	gas
.....	Osage.....	Ohio Oil's Osage 2, ne sw ne 32-22n-9e.....	8–20–42	Burgess sand, Penn....	2220	2199–2220	F. 8.5-mil	gas
.....	Pawnee.....	Johnson O. & G.'s Eichelberger 1, cw½ se sw 10-20-7e.....	1– 1–42	Skinner sand, Penn....	2503	2497–2501	F 1-mil	gas
Hartshorne.....	Pittsburgh....	Pub. Ser. Co. of Okla.'s Choctaw Tribal Ld. 1, se se ne 9-4n-16e.....	1–19–42	Hartshorne sand, Penn.	1630	1204–1280	F 1.9-mil	gas
Ennis (Hugoton)	Texas.....	Cabot Carbon's Ennis 1, ce½ 4-2n-15ecm.....	11–17–42	Ft. Riley lime, Perm...	2700	2580–2700	F 18-mil	gas
.....	Texas.....	Peerless O. & G.'s Woodward 1, c ne 3-5n-18ecm.....	4–14–42	Dolomite, Perm.....	2740	2650–2740	F 8-mil	gas

OKLAHOMA: NEW OIL PAYS

Pauls Valley....	Garvin.....	Pure's Cashian-Teter 1, ne 31-4n-1e.....	7– –42	Sand, Penn.....	4115	4081–4115	262	..
Midwest.....	Okfuskee.....	Portable Drlg.'s Englesman 1, nw 30-11-10e.....	3– –42	Hunton lime, Devo....	2895	2872–2895	70	..
Centerpoint....	Pottawatomie.	Norbla Oil Co.'s Wagner 1, nec 6-9-3e.....	10– –42	Earlsboro sand, Penn...	4960	4930–4960	30	..
Hotluke.....	Pottawatomie.	Wood Oil Co.'s Webber 1, nw nw nw 26-9-4e.....	5– –42	Hunton lime, Devo....	4175	4150–4175	322	..
Tecumseh, East.	Pottawatomie.	Atlantic's Lea 3, nw sw se 16-9-4e.....	4– –42	2nd Wilcox sand, Ord...	4838	4835–4838	198	..
Keokuk.....	Seminole.....	Carter's Riddle 2, nw¼ 3-10-6e.....	2– –42	Wilcox sand, Ord.....	4354	4348–4354	302	..
Velma.....	Stephens.....	Skelly's Robberson 4, cne ne 35-1s-5w.....	7– –42	Simpson sand, Ord....	7215	7120–7215	244	..
Frederick.....	Tillman.....	Johnson's Longacre 2, sw ne se 32-2s-17w.....	1– –42	Canyon lime, Penn.....	2948	2943–2948	25	..
Liberty.....	.....	Sunray's Schultz 1, cnw se 9-22n-2e.....	10– –42	Perry sand, Penn.....	2610	2600–2610	120	..

OKLAHOMA: NEW GAS PAY

Okemah.....	Okfuskee.....	Deep Rock's Heneha 1, nw nw sw 21-11-9e.....	5– –42	Cromwell sand, Penn...	3463	3446–3463	6-mil	gas

East Texas Border County

OIL FIELD

Kildare.....	Cass.....	John Messenger's Benefield-Singleton 1, Jno. Wanhop sur.....	3– –42	Gloyd lime, L. Glen Rose, L. Cret.....	6202	5992–6010	P 186	40.8

Eastern Texas

OIL FIELDS

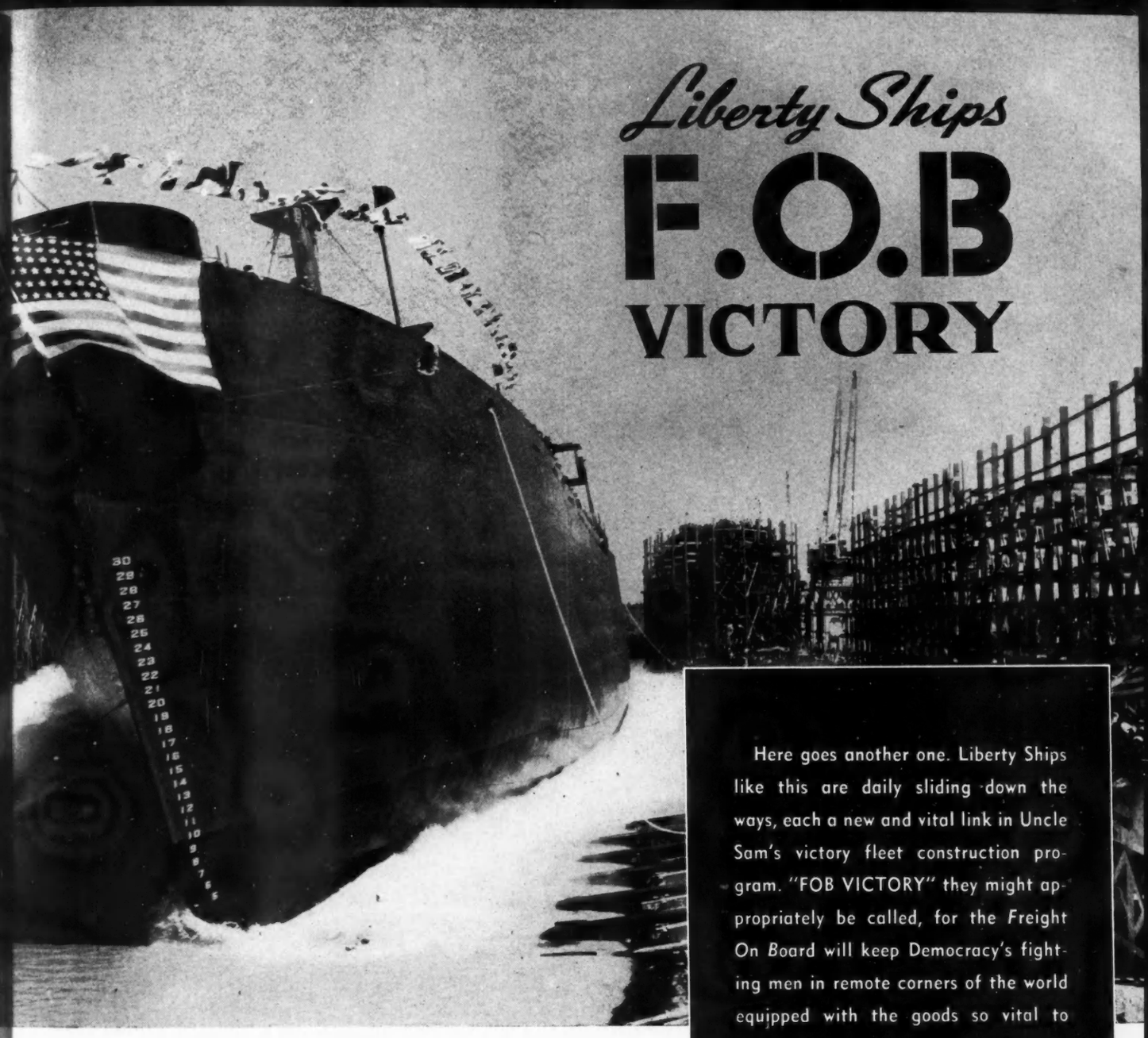
Concord.....	Anderson.....	Magnolia's Campbell 1, 660 ft out swc 90.31 ac tr, Jess B. McNealy Lg....	4–22–42	Woodbine sand, U. Cret.	4669	4522–4540	P 201	12
Larissa.....	Cherokee.....	Humble's Curtis 1, 660 ft s of m/w/n & 860 ft e of m/w/w ls 95.98-ac. lse, Jno. Vaughn sur No 53.....	10– 1–42	Pettit sandy lime, L. Trinity, L. Cret.....	10611	10160–10212	F 37; ¼"	48
Wieland.....	Hunt.....	Hollandsworth Dr. Co.'s Baker 1, 660 ft out m/n/nwc 82.4 ac tr, Jno Warren sur.....	6–23–42	Woodbine sand, U. Cret.	2778	2761–2773	F 266; ¼"	39.5
Coke.....	Wood.....	Amerada's C. B. Kennemer 1, 660 ft out m/n/nwc Jos. Knight sur.....	6–10–42	Paluxy sand, Trinity, L. Cret.....	6384	6262–6350	F 1920; 2"	27.5
Quitman.....	Wood.....	Delta Dr. Co.-Rube Benton's Goldsmith-Shell 1, 633 ft fr n & 660 ft fr e ls 67½ ac lse, S. G. Purse sur A-456.....	12– 1–42	Paluxy sand, U. Trinity, L. Cret.....	6544	6280–6310	F 726; ¼"	43

EASTERN TEXAS: GAS FIELDS

Grimes.....	Houston.....	Russell Grimes's M. B. Ellis 1, 2700 ft fr e & 700 ft fr s ls Jno. Daly Sur A-342	10–29–42	Woodbine sand, U. Cret.	5939	5932–5939	29 mil	gas
Hooser.....	Navarro.....	Jno. W. Hooser's Black 1, 800 ft nw of se & 330 ft sw of ne ls 40 ac. lse, B. G. Balthrope sur.....	7–13–42	Woodbine sand, U. Cret.	3352	3234–3252	52 mil	gas

EASTERN TEXAS: NEW OIL PAY

Chapel Hill.....	Smith.....	Sun Oil's Friedlander 2, 660 ft fr s & 1000 ft fr w ls Jno. Slaydon sur.....	6–16–42	Rodessa lime, L. Cret...	8448	5541–5550	F 102; 2/32"	39



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TEXAS ELECTRIC STEEL CASTING CO.

HOUSTON, TEXAS

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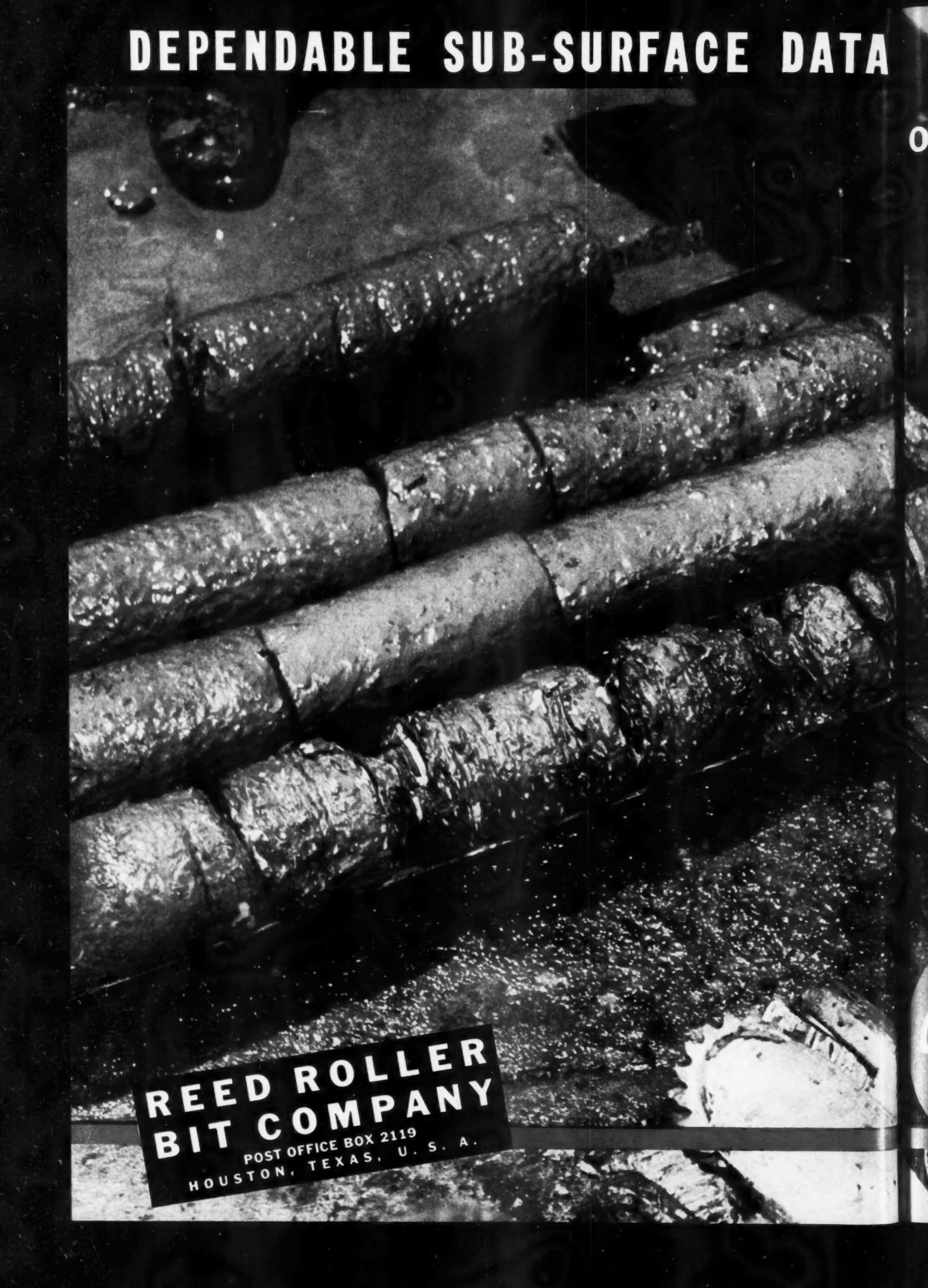

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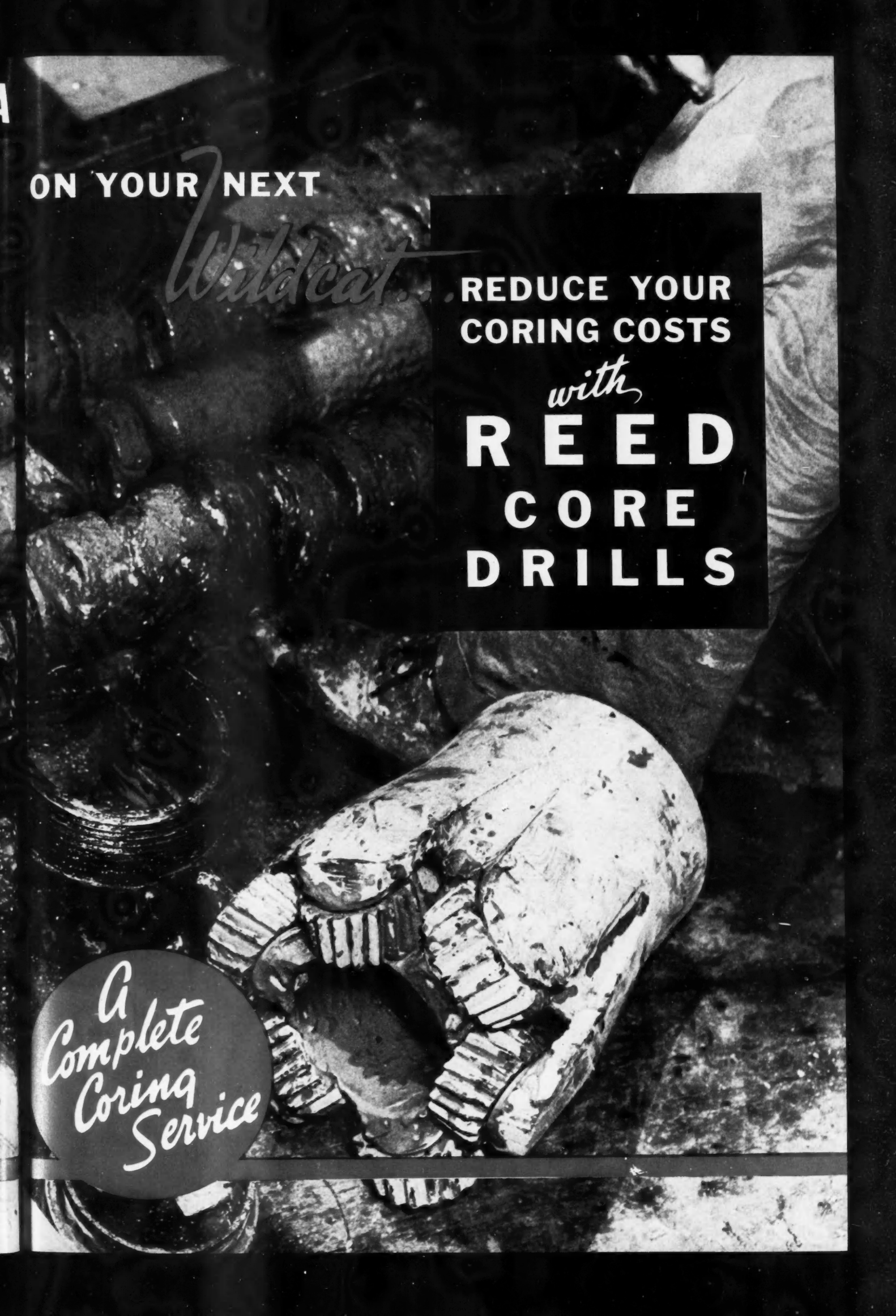
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DISCOVERY WELLS OF NEW FIELDS AND NEW PAY ZONES OPENED IN U. S. IN 1942

For explanation of data in "Initial Production" and "Producing Formation" columns—see note at beginning of tables, page 97.

North Texas

OIL FIELDS

Field	County	COMPANY, WELL AND LOCATION	Date Completed	Name, Character and Age of Producing Formation	Total Depth (Feet)	Completion Horizon (Feet)	Initial Production, Method, and Choke	Gravity of Oil
Ada Anderson	Archer	W. E. Prod Co.'s Anderson 1, 660 ft out nec blk 8, W. E. Roberts sur A-110	5-16-42	Cisco sand, Penn.	1462	1452-1462	P 68	37
Cooper	Archer	Geo. W. Cooper's C. Knight 1, 330 ft out nec w½ blk 69 KWVFL sur	8- 6-42	Detrital lime, Penn.	5028	4888-4903	F 131; ¼"	43.1
	Archer	Perry Browning's Browning 1, 330 ft out sec blk 89, German Emigration Co. sur	10-19-42	Ellenburger dolomite, Ordov.	5330	5210-5330	F 585; ½"	41.6
Ebnother	Archer	W. E. Prod. Co.'s Ebnother-Shell 1, 330 ft fr e & 1200 ft fr n ls. sec 102 Harris subdiv	4-15-42	Cisco sand, Penn.	1280	1276-1280	P 115	37
Scholl	Archer	Guy J. Scholl's C. W. Cahoon 1, 1264 ft fr s 1536 ft fr e ls Jno. Ruddle sur A-355	7- 2-42	Cisco sand, Penn.	1103	945-960	P 10	38
Stafford	Archer	W. R. Stafford et al's Richardson-Texaco 2, 847 ft fr n & 330 ft fr w ls W. C. McCune sur A-943	9-30-42	Cisco sand, Penn.	1236	1225-1236	P 8	38
East Rendham	Baylor	Jordan Pet. Co.'s Fayette-Christie 1, 511 ft s, 853 ft w of sec w½ N-1500 ac of 4153.2-ac tr, Fayette CSL sur	7- 7-42	Palo Pinto sny li, Canyon, Penn.	3025	3023-3025	P 90	37.5
Fortex	Clay	Fortex Oil Corp.'s Dallas Jt Stock Bank-Texaco 1, 1650 ft fr sel, 990 ft fr ne li 440-ac tr, sec 35, J. Duncan sur A-112	10- 7-42	Cisco sand, Penn.	1134	1104-1134	P 36	41
Watson	Clay	Roy Lee, Tr-Continental's Watson 1, 330 e and s of swc J. A. Scott sur, in W. A. Farris sur	2- 5-42	Basal Bend lime, Penn.	5484	5454-5484	F 704	43
	Grayson	Denver Prod. & Ref. Co. (was Tolbert-Finston's) Jewell 1, 467 ft out swc 159-ac lse, Wm. Allen sur A-15	6-17-42	Strawn sand, Penn.	8403	7168-7242	P 5	..
Perrin	Jack	Roeser-Pendleton, Inc.'s W. J. Webb 1, 530 ft fr n & 470 ft fr w ls J. E. Middleton sur A-2125	1- 7-42	Strawn sand, Penn.	2933	2892-2933	F 71	44
Taubert-McKee	Jack	Taubert-McKee-Sinclair Prairie's Boyd 1, 660 ft out nec Seth H. Hazel sur A-258	4-19-42	Ellenburger dolomite, Ord.	6435	6408-6418	P 33	41
Worsham-Steed	Jack	Joe A. Worsham's G. Sewell 1, 2600 ft fr e & 4600 ft fr s ls Daniel Crenshaw sur A-128	2-24-42	Smithwick	4716	4691-4716	F 168	44
Eanes	Montague	Sinclair Prairie's J. H. Eanes 1, 2660 ft fr s & 735 ft fr w ls G. A. Bench Sur A-1521	10-28-42	Bas. Bend conglom Penn.	7070	5912-5922 5828-5840	F 70; 1"	41.2
Forestburg	Montague	Sinclair-Prairie's I. M. Jones 1, 467 ft se of nw & 1400 ft ne of sw ls of 166.8 ac tr, I. Singletary sur A-707	5-20-42	Marble Falls lime, Penn.	8696	7176-7323	F 2369; open 2½" tub.	42
Hildreth	Montague	Continental's Hildreth 1, 856 ft fr s & 509 ft fr w ls of E. T. Ry. sec 53, A-250	10-16-42	Bas. Simpson sny li, Ord.	7256	7160-7202	F 329; 11/16"	40
Illinois Bend	Montague	R. C. Lipscomb's Vaughn-Harmon 1, 660 ft out nec W. C. Winters sur A-842	11-20-42	Strawn sny li, Penn.	4982	3859-3865	P 150	29.7
Ketchum	Montague	Continental's J. A. Ketchum 1, 330 ft fr nw & 990 ft fr sw ls Hill CSL Sur sec 43	12- 9-42	Canyon sand, Penn. (T. D. in Elnbgr)	7506 (Elnbgr)	3330-3336	P 36	37
King	Montague	Seitz-Comegys & Seitz's King 1-B, 1551 ft fr n & 330 ft fr e ls s½ blk 8, E. B. Wooten sur	8-28-42	Canyon sny li, Penn.	2517	1630-1637	P 20	38
Mueller	Montague	Continental's P. Mueller 1, 467 ft fr se & sw ls ne 116.86-ac tr, P. Hamilton sur A-335	5-16-42	Simpson sand, Ord.	7223	7218-7223	F 369; ¾"	45
Sanders	Montague	Sinclair-Prairie's Jess Sanders 1, 660 ft out swc blk 114, J. C. Mattison sur A-471	4-25-42	Bend lime, Penn.	5972	5962-5972	F 3002	36.8
Brockman	Throckmorton	Jones-Stasney-Groover-Rose's Brockman 2, 660 ft out swc blk 94, Comanche Indian Reserve sur (now abandoned)	5-16-42	Marble Falls lime, Penn.	4761	4707-4761	F 24; open tub.	42
Potts	Wilbarger	Consolidated Oil Co.'s Potts 1-D-E, 3300 ft out sec H&TC sec 4, blk 7 (now abandoned)	2-25-42	Mississippian	4539	4506-4539	F 1247	43
Park Springs	Wise	Stanolind's D. Menasco 1, 707 ft fr e & 669 ft fr s ls Falls CSL sec 9	12- 9-42	Bend sdy lime, Penn.	7310	5790-5818	P 92	38.8
Daws	Young	Standard of Texas-Hanlon & Buchanan's Daws 1, 660 ft fr w & 1207 ft fr n ls TE&L sec 751	9-27-42	Bend lime, Penn.	3860 (Elnbgr)	3847-3860	P 111	38
Holbert	Young	Standard of Texas-Hanlon & Buchanan's Holbert 1, 1207 ft fr s & 660 ft fr w ls e½ TE&L sec 726	11-19-42	Bend lime, Penn.	5236	3857-3862	F 166; ½"	39
Killian	Young	W. R. Worthington's M. Killian 1, 750 ft fr n l & 550 ft fr e l TE&L sec 211	4-17-42	Cisco sand, Penn.	949	937-949	P 10	38
Murray	Young	Standard of Texas-Hanlon & Buchanan's S. R. Donnell 1, 660 ft fr n & 1400 ft fr w ls TE&L sec 2371	10-29-42	Mississippian	4503	4466-4503	F 685	43
Padgitt	Young	Shell's Bullock 1, 467 ft out nec TE&L sec 343, (PB fr 5001 ft)	6-15-42	Mississippian	4830	4748-4830	F 1169; 2"	44.2
Steele	Young	Henry Zweifel's W. E. Steele 1, 660 ft out nwc J. C. Van Hooser sur A-1648	5- 5-42	Bend lime, Penn.	4412	3947-3956	F 167; 1/2"	42.4
Talbot	Young	A. G. Talbot-S. W. Robitaille's Ferguson 1-A, 560 ft out m/s/sec S. Tynes sur A-274	9-30 42	Strawn sand, Penn.	3449	3438-3449	F 404; ¾"	43.3

NORTH TEXAS: GAS FIELD

	Young	Panhandle Ref. Co. et al's Brundidage 1, 2695 ft e & 660 ft s of nwc S. Holderness sur, in J. T. Townsend sur A-1645	8-14-42	Bend lime, Penn.	3550	3382-3400	7 mil; 2"	gas

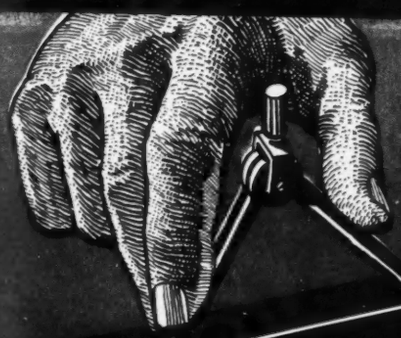
NEW OIL PAYS

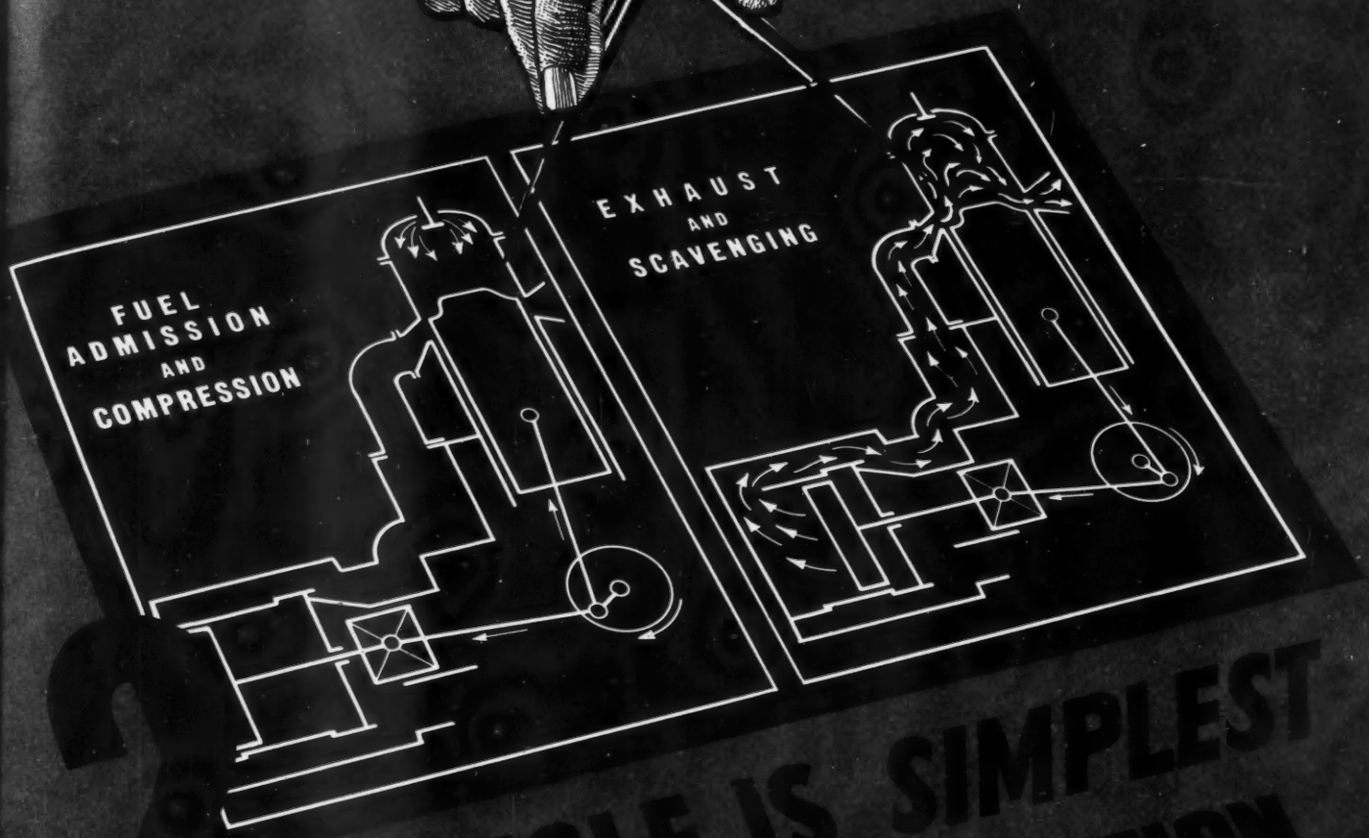
Halsell	Clay	Bridwell Oil's Halsell 8-A, 1400 ft fr n & 467 ft fr e ls sec 34, Jno Rogers sur	4-18-42	Upper Strawn sd, Penn.	3916	3656-3663	P 17	43
Halsell	Clay	Bridwell Oil Co.'s Halsell 9-A, 467 ft fr n & 3106 ft fr w ls sec 8, A. P. Belcher-W. C. Ry. sur A-843	2-25-42	Bend lime, Penn.	5444	5432-5444	P 2	40
New York City	Clay	Deep Oil Dev. Co.'s Hapgood 1-A, 330 ft out m n nwc Jas. Walker sur.	2-21-42	Strawn sand, Penn.	4952	4912-4937 4941-4952	P 126	41
Watson	Clay	Whitaker Oil Co.'s Gragg 1, 933 ft fr n & 467 ft fr w ls TE&L sec 2672	12- -42	Strawn sdy li, Penn.	3680	3655-3676	P 115	40
Bryson	Jack	Hill & Hill Inc.'s Clayton Bros 5-B, 1717 ft fr s & 2266 ft fr w ls E-70 of W-300 of N-404.85 of 715¼-ac tr, Lewis Knight sur	11-17-42	Marble Falls lime, Penn.	5435	4654-4671	P 20	..
Benton	Montague	Sinclair-Prairie's Lena Benton 2, 330 ft fr n & 1263 ft fr w ls 120-ac tr T. R. Jackson sur A-349	5- 4-42	Strawn sand, Penn.	5210	4540-4559	F 124; 2" P 85	42.5 42.3
	Throckmorton	Humble's Mathews 1, 572 ft fr n & 1931 ft fr e ls Alvin Tarter sur	11-30-42	Mississippian li, Miss.	4613	4597-4611	P 10	38
	Throckmorton	A. R. Matthews' Brockmen 1, 330 ft out swc sec 94, Comanche Indian Res.	11- 9-42	Cisco sand, Penn.	734	728-734	P 70	42
Potts	Wichita	Consolidated Oil Co.'s Potts 2-D-E, 1980 ft out sec H&TC 4, blk 7	4-15-42	Strawn sand, Penn.	4064	4053-4064	F 992; 1/8"	45
Burns-Ragland	Young	L. T. Burns' L. Williams 1, 467 ft out nwc E½ TE&L sec 257	8- 5-42	Mississipian lime, Miss.	4984	4882-4910		
Kisinger	Young	Hanlon & Buchanan, Inc.'s Street 2, 495 ft fr sw & 4113 ft fr se ls 460-ac tr, Jno Conner sur A-57	9-11-42	Marble Falls sny conglom, Penn.	4080	4069-4080	F 494; ½"	43
West Knox	Young	Mudge Oil Co.'s Harrison 10, 510 ft fr n & 100 ft fr w ls TE&L sec 3407	11-11-42	Mississippian lime, Miss.	4770	4764-4770	F 1184; 1/16"	43

West Central Texas

OIL FIELDS

	Brown	M. W. Walker's W. D. Shields 1, 450 ft fr e & 150 ft fr n ls 50-ac lse, blk 23, Geo. W. Pentecost sur No. 100	3-18-42	Cisco sand, Penn.	1266	1226-1266	P 9	36
Prichard	Callahan	Anderson-Prichard Oil Corp.'s Sealy-Smith 1, sw ne nw GH&H sec 121, blk 2	11- 2-42	Strawn (Morris) sand, Penn.	3064	3051-3055	P 88	40
	Coleman	W. M. Holland-Gladys Hoffman's Dr. R. Bailey 1, se ne sw HT&B Ry sec 17	6-13-42	Marble Falls lime, Penn.	2793	2720-2738	P 165	41





2-CYCLE IS SIMPLEST ENGINE CONSTRUCTION

NO VALVES TO GRIND

Simplicity of design — few moving parts — are tremendous advantages in mechanical equipment. The 2-cycle engine possesses these great advantages over the 4-cycle. It has an uninvolved fuel injection system — no exhaust valves; it represents the extreme of simplicity in operating principle.

Note the simplicity of CLARK Super-2-Cycle operation, diagramed above. Every up-stroke compresses a fuel mixture. Every down-stroke is a power stroke. There is no "waste stroke", to cut power in half and double wear and tear. Scavenging with 25% excess air is instant and thorough.

Other basic advantages in the CLARK 2-Cycle are: 1. Greater Fuel Economy; 2. Less Wear; 3. Smoother Operation; 4. Fewer Man Hours; 5. Lower Oil Consumption; 6. Lower Installation Cost.

Investigate these claims. Our engineers are at your call.

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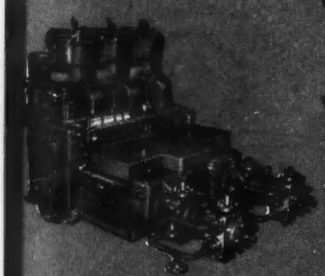
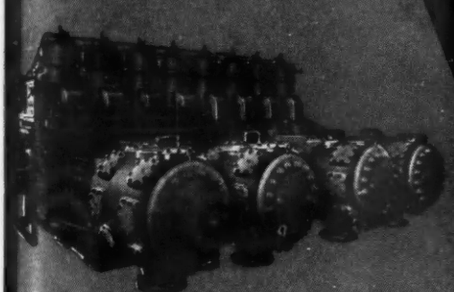
CLARK
Super-2-Cycle



CLARK 3-Cyl., 300 H. P. "Super-2-Cycle" Angle Compressor



CLARK 8-Cyl., 800 H. P. "Super-2-Cycle" Angle Compressor

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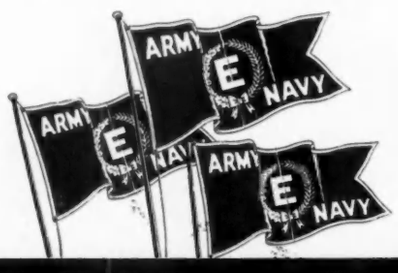
THROUGH THE WORLD'S LARGEST AND MOST DRAMATIC PIPE LINE

August, 1942, marked the beginning of one of the really big engineering projects needed to win this war . . . a 24-inch pipe line to bring precious oil to the Eastern Seaboard...a rush against time...a two-fisted blow at the axis.

Yes, a great feat and in a hurry . . . the largest pipe line in the world, planned and built by men who know more about pipe lines than anyone in the world. The first 531 miles of the War Emergency Pipe Line is practically completed—so now on to the next 812 mile stretch to the seaboard!

Such a pipe line needs bigger pumps than have ever been used before for such service. Ingersoll-Rand is proud that its Cameron Division was called upon to develop new pumps for the line . . . proud that in the first 531 miles there are 10 large 1500 hp Cameron Centrifugal Pumps . . . prouder still that there will be 26 more of these units in the remaining 812 miles of line.

Ingersoll-Rand Compressors and Pumps and Engines are serving all divisions of the petroleum industry—refining, aviation gasoline, synthetic rubber, recycling, repressuring, pipe lines, bulk stations. And Ingersoll-Rand Portables and Air Tools helped build the Big Inch Line.



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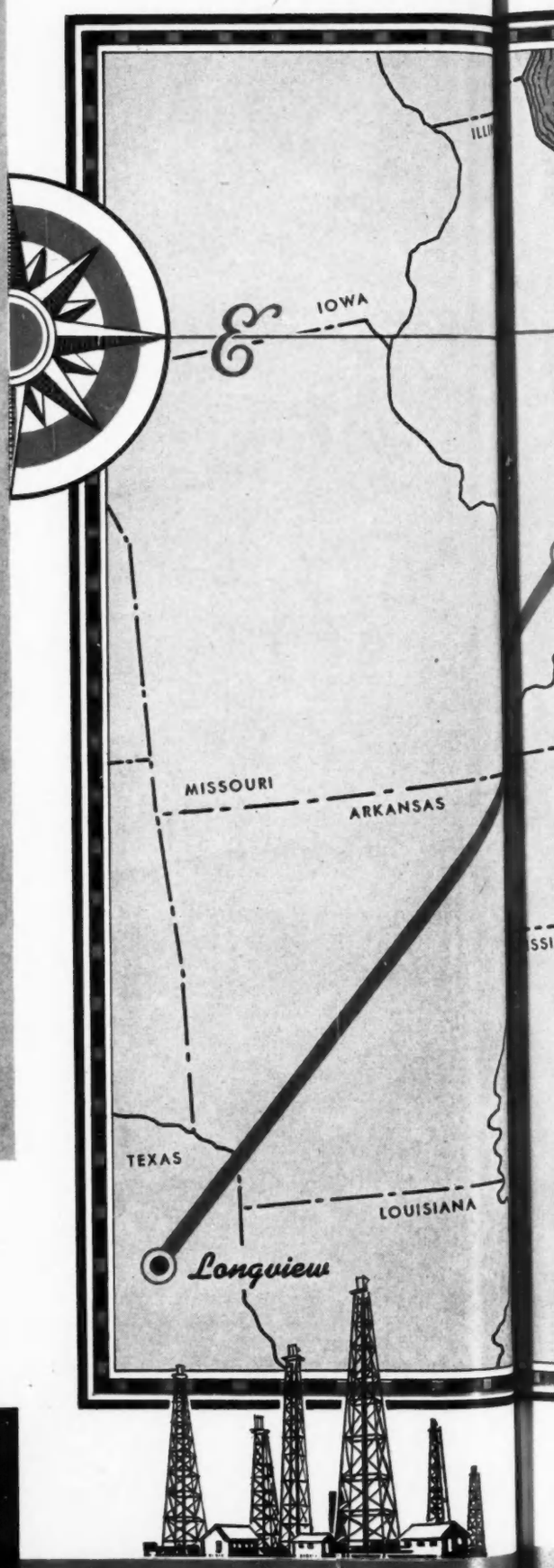
10-238



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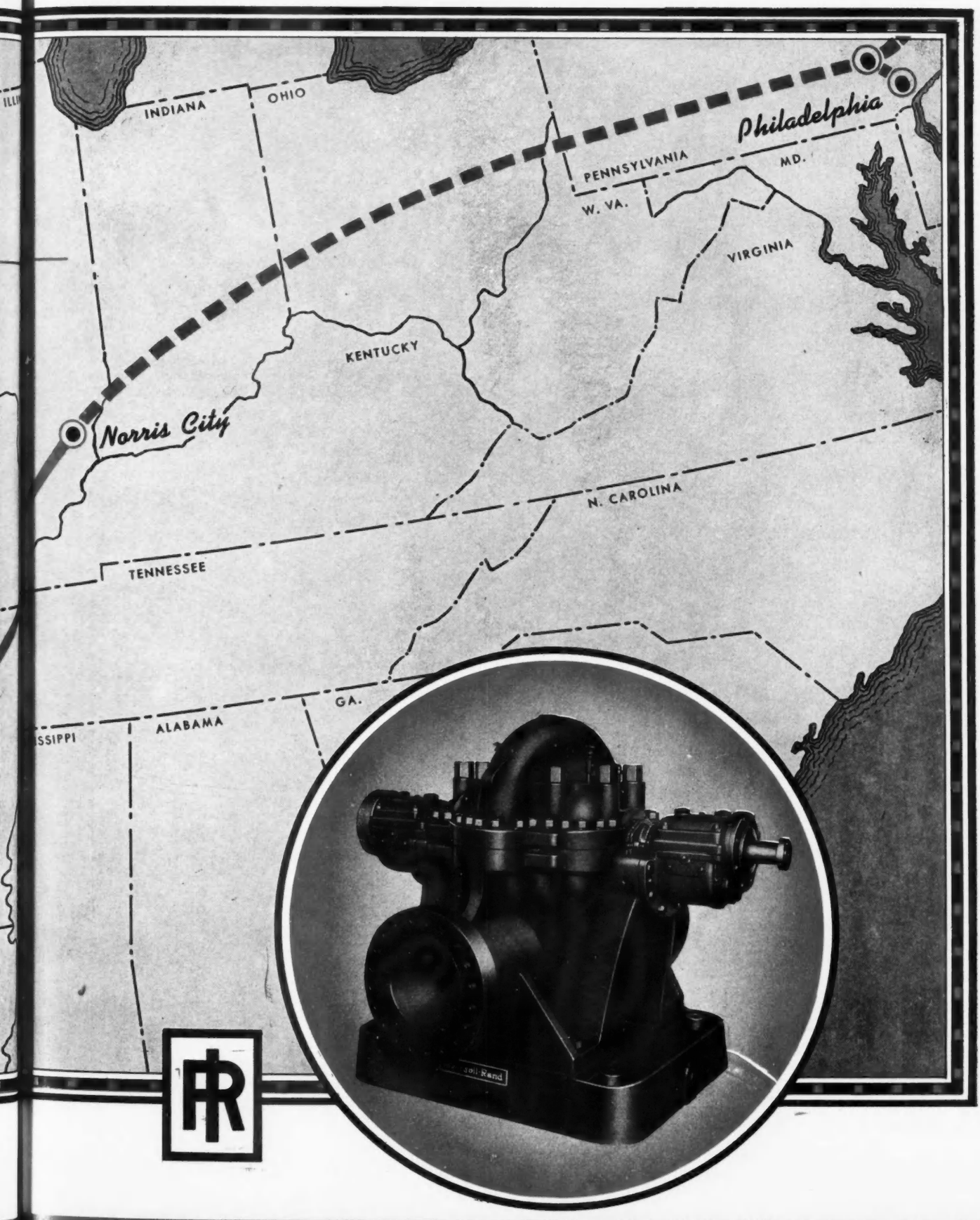
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DISCOVERY WELLS OF NEW FIELDS AND NEW PAY ZONES OPENED IN U. S. IN 1942

For explanation of data in "Initial Production" and "Producing Formation" columns—see note at beginning of tables, page 97.

West Central Texas—Continued

OIL FIELDS

Field	County	COMPANY, WELL AND LOCATION	Date Completed	Name, Character and Age of Producing Formation	Total Depth (Feet)	Completion Horizon (Feet)	Initial Production, Method, and Choke	Gr av-ity of Oil
Coker	Coleman	H. T. Owen-H. H. Adams' M. L. Coker 1, c nw se GH&H 72, blk 2	4-30-42	Strawn (Morris) sand, Penn.	3064	3040-3050	F 199; ¾"	46
	Coleman	C. Kroll-E. S. Bahney's R. W. Starnes 1, 2350 ft fr n & 2850 ft fr w ls GH&H 2, blk 1	12-19-42	Canyon sdy lime, Penn.	2020	2017-2020	P 12	38
	Comanche	J. C. Hamer et al's Mary Smith 2, 1000 ft fr e & 600 ft fr s ls BBB&C sec 31	1-13-42	Cisco sand, Penn.	752	742-752	P 29	39
Grogan	Jones	Lewis Prod. Co.'s J. W. Grogan 1, 1650 ft fr s & 3330 ft fr e ls M. R. Longoria sur.	8- 4-42	Cisco sand, Penn.	2140	2128-2135	P 110	37
	Shackelford	C. B. Christie & Evans' W. P. Newell 1, 1720 ft fr s & 335 ft fr e ls T&P Ry 13, blk 11	10- 5-42	Cisco sand, Penn.	1018	1006-1018	P 19	38
	Shackelford	J. W. Keys' A. Andrews 1, 1405 ft fr s & 660 ft e ls E. T. Ry. sec 14	10-12-42	Cisco sand, Penn.	583	579-581	P 8	36
	Shackelford	C. J. Kleiner-L. Heltzel's Dawson-Conway 1-A, 330 ft fr s & 220 ft fr w ls n½ E.T.Ry. sec 146	2- 3-42	Cisco sand, Penn.	1441	1427-1435	P 66	38
Poor Farm	Shackelford	R. H. Roark's Co. Poor Farm 1, nw se sw Blind Asylum Lds, sec 4	11-14-42	Cisco sand, Penn.	827	821-827	P 20	37
Roark-Nail	Shackelford	R. H. Roark's Nail 1, c sw se E.T. Ry sec 135	6-29-42	Cisco sny li, Penn.	1522	1508-1521	P 60	38
Reddin	Taylor	Butler-Horne Dr. Co.-Geochemical Survey's S. M. Reddin 1, 780 ft fr w & 330 ft fr s ls T&P 25, blk 17	9- 5-42	Flippen lime, Penn.	2251	2248-2251	F 627; 1/4"	39.6
Trent	Taylor	C. W. & W. L. Snoddy's L. S. Tipton 1, 330 ft out sec w½ n-400-ac T&P Ry sec 20, blk 18	2-23-42	Cisco sand, Penn.	2771	2745-2771	F 518	42.4

WEST CENTRAL TEXAS: GAS FIELDS

	Brown	Wm. D. Austin's T. S. Williams 1, sw se se HT&B sec 40	11-21-42	Cisco sandy lime, Penn.	1437	1358-1425	0.25 mil; 2"	gas
	Brown	Central Texas Gas Co.-J. B. Whitesides' Kirkpatrick 1, 1200 ft fr ne & 5200 ft fr nw ls Jno Greenwood sur No. 155	11-20-42	Cisco lime, Penn.	1458	1287-1450	0.25 mil; 2"	gas
Talpa	Coleman	Jas. C. Ellis-Fred J. Estes' I. N. Bridges 1, 467 ft out sec 97-ac tr, E.T.Ry sec 107	5- 5-42	Strawn sand, Penn.	3656	3293-3335 3386-3414	1.5 mil; opn tub.	gas
	Coleman	Woodley Pet. Co.'s I. M. Thompson 1, c ne ne HT&B 2, blk 1	7-20-42	Strawn sand, Penn.	3492	2810-2839	2.9 mil; opn tub.	gas
Darnell	Parker	Walter K. Jones' Gus Darnell 1, 660 ft out nwc T & P sec 173, A-1363	12- -42	Canyon lime, Penn.	6126	3214-3240	0.9 mil	gas

WEST CENTRAL TEXAS: NEW GAS PAY

Jim Ned	Coleman	Lewis Prod. Co.'s Greer 1, blk 2, H. Kegans sur No. 520	1-13-42	Strawn sand, Penn.	3492	3482-3492	8 mil	gas

WEST CENTRAL TEXAS: NEW OIL PAYS

Crownover	Brown	Guyle Greynolds' Boatman 1, 932 ft fr n & 1398 ft fr e ls BBB&C Ry sec 25	2- 7-42	Marble Falls sand, Penn.	2965	2938-2965	P 7	39
Crownover	Brown	Guyle Greynolds' Green 1, c sw sw BBB&C Ry sec 26	8-11-42	Cisco sand, Penn.	1019	1003-1019	P 22	36
	Callahan	Ben Dansby et al's Ramsey 1, 1400 ft out nec TE&L sec 2277	6-20-42	Bend lime, Penn.	3377	3224-3277	P 18	42
Jim Ned	Coleman	Lewis Prod. Co.'s Greer 2, 330 ft fr n & 1200 ft fr w ls blk 2, H. Kegans sur.	1-19-42	Strawn sand, Penn.	3500	3480-3500	F 116	43.5
Wimberly	Jones	Fain-McGaha Oil Corp.'s Butler 1, 1901 ft fr w & 330 ft fr s ls lot 5, L. B. Ramsey sur 39	10- 5-42	Cisco (Tannehill) sand, Penn.	2200	2191-2200	F 608; ½"	42
Elliott	Shackelford	R. H. Roark's Elliott 1-B, c se sw L.A.L. Sec 9	1-27-42	Strawn sand, Penn.	2940	2902-2940	F 107	40
Corbett	Stephens	Fleming Oil Co.'s Corbett 4, 867 ft fr n & 1700 ft fr w ls 320-ac tr, S.P. Ry sec, blk 3	9-21-42	Ellenburger dolomite, Ord.	4855	4545-4555	F 10	40
Donnell	Stephens	T. P. Coal & Oil's-Sinclair Prairies' Donnell 1-A, 3869 ft fr nw & 467 ft fr sw ls TE&L sec 1208	6-25-42	Marble Falls sand, Penn.	4418	3928-3936	P 78	40
Lake Kirby	Taylor	J. C. Hunter et al's Anderson 1, c ne sw L.A.L. sec 8	1-10-42	Canyon sand, Penn.	3393	3360-3393	P 19	40
Reddin	Taylor	Butler-Horne Dr. Co.-Geochemical Surveys' Frazier 1, 330 ft out sec T&P 26, blk 17	10-26-42	Hope lime, Penn.	2444	2440-2448	F 725; ¾"	40

West Texas

OIL FIELDS

Fullerton	Andrews	Fullerton Oil Co.'s Wilson 1, ne sw se PSL sec 15, blk A-32	3- 3-42	Clear Fork lime, Mid. Permian	8005	7010-7280	F 682; ½"	41
Mascho	Andrews	Mascho Oil Co.-Cross-Johnson Dr. Co.'s University-Sun 1, c ne ne sec 27, blk 10	5-30-42	San Andres li, Perm.	4514	4420-4514	P 178	31.9
Midco	Andrews	Mid-Continent's University-South 1, c nw nw sec 16, blk 10	10-14-42	San Andres li, Perm.	4599	4520-4599	P 95	32
Sunray-Wright	Cochran	Sunray Oil Co. (was J. T. O'Neal's) Wright 1, 1165 ft fr s & 1473 ft fr e&w ls lab 14, lg 61, Martin CSL sur	7-11-42	San Andres li, Perm.	4998	4953-4972	P 238	20
Blackwell	Coke	Wm. F. Morgan's Craft 1, c ne ne H&TC 276, blk 1-A	5-16-42	Palo Pinto lime, Penn.	3828	3821-3828	P 169	41.5
McKee	Crane	Magnolia's Glenn 1, 660 ft fr ne & se ls H&TC 20, blk 1	9- 4-42	Simpson (McKee) sand, Ord.	6186	6125-6186	F 226; ¼"	43.2
Sun-Shannon	Crockett	Sun Oil's Shannon 1, 660 ft out swc w-1427 of n-1800 ac of lg 1, Archer CSL sur	4-29-42	Permian lime	2089	2085-2089	P 364	18.6
Midway	Ector	Oil Well Dr. Co.'s Johnson-Shell 1, 467 ft out nwc T&P 48, blk 44, T-1-S.	2-26-42	Permian lime	4353	4210-4353	F 20	33
Robertson	Gaines	Texas Co.'s Robertson 1, c nw ne PSL 25, blk A-21	11- 9-42	Glorietta lime, Permian	7686	5910-5950	F 299	26
Stennett	Lubbock	Stanolind's Stennett 1, 660 ft out swc lab 18, leag 4, San Augustine CSL	8- 1-42	Clear Fork lime, Perm.	7000	4685-4749	P 66	26.5
Chancellor	Pecos	Pure's T. P. Land Trust 1-A, c sw sw T&P 31, blk 49, Tsp 10	3-25-42	Delaware sand, Perm.	6000	5082-5074	F 62	37.5
Byrd	Ward	Stanolind's Byrd 1, c e¼ n¼ H&TC sec 34, blk 34	3-16-42	Permian lime	2880	2634-2679	F 29	30
Monahans-Ellenburger	Ward	Shell's Sealy-Smith 1, ne ne se GMMB&A sec 38, blk A	8- 7-42	Ellenburger dolo, Ord.	10545	10082-10364	F 2852; opn 2" tub	46
Nichols	Ward	Cross Dev. Co. (was J. D. O'Quinn's) Nichols 1, 2310 ft fr ne & 330 ft fr se ls H&TC 5, blk 5	6- 4-42	Sandy lime, Permian	2449	2400-2449	P 49	35
Pruitt	Ward	J. E. Fitz-Patrick-Fred Hyer's Pruitt 1, 467 ft out s c W&NW sec 23, blk 1	7- 6-42	Delaware sand, Perm.	4869	4831-4869	F 15; 2" tub.	32
Pyote	Ward	Darby Pet. Corp.'s University 1, c se sw sec 19, blk 16	3-25-42	Permian lime	2847	2827-2847	F 897	20.8

WEST TEXAS: NEW OIL PAYS

Embar-Ellenburger	Andrews	Phillips' University-Andrews 2, c sw se sec 30, blk 10	5- 7-42	Ellenburger dolo, Ord.	7855	7806-7855	F 2274; 2" tub	44.5
Embar-Tubb	Andrews	Phillips' University-Andrews 9, c nw nw sec 32, blk 10	10-25-42	Clear Fork (Tubb) lime, Permian	8174	6210-6275	F 259	43.5
Wentz	Pecos	Gulf & L. H. Wentz's Millar 3, c se nw H&GN sec 43, blk 11	6-23-42	Cambrian	4406	4378-4392	P 132	38.8
Big Lake	Reagan	Big Lake Oil Co.'s University 19-C, 1928 ft fr w & 392 ft fr s sec 24, blk 9	2-16-42	U. Clear Fork, Permian	4373	4310-4373	F 3424	42.2
McMillan	Runnels	Victory Oil Co.-J. M. Castor's Brevard 1-A, 1100 ft fr n & 150 ft fr w ls blk 21 N Travis sur 533	1-11-42	Canyon (Palo Pinto), Penn.	3568	3524-3568	P 10	38
Aspermont	Stonewall	Shell's Rutherford 2, sw sw ne H&TC sec 144, blk 1 (now abandoned)	3-17-42	Strawn sand, Penn.	5155	5135-5155	P 54	40
Monahans-Permian	Ward	Shell Oil's Sealy-Smith 2, se sw ne GMMB&A sec 38, blk A	11-11-42	Clear Fork (Tubb) sny li, L Permian	5741	5633-5643	♂ 759; 2" tub.	34.5

WEST TEXAS: NEW GAS PAY

Clara Couch	Crockett	Humble's Owens 1-B, c sw ne HE&WT sec 8, blk GG	3-31-42	Permian	1075	1060-1075	0.2	gas

"For what avail the Plow or Sail, or Land, or Life, if Freedom fail?"
(RALPH WALDO EMERSON)

. . If Freedom Fail!

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DISCOVERY WELLS OF NEW FIELDS AND NEW PAY ZONES OPENED IN U. S. IN 1942

For explanation of data in "Initial Production" and "Producing Formation" columns—see note at beginning of tables, page 97.

Texas Panhandle

GAS FIELDS

Field	County	COMPANY, WELL AND LOCATION	Date Completed	Name, Character and Age of Producing Formation	Total Depth (Feet)	Completion Horizon (Feet)	Initial Production, Method, and Choke	Gravity of Oil
Coldwater	Sherman	L. R. Hagy-Harrington-Marsh's Bivins-Coldwater 1, 2652 ft fr s & 2670 ft fr e ls GH&H sec 21, blk 3-B	7-25-42	Dolomite, Permian	3256	2989-3226	5.6	gas

Upper Texas Gulf Coast

OIL FIELDS

Orange Hill	Austin	Ohio Oil Co.'s Kaechely 1, 660 ft fr se & nel 250-ac tr, Vital Flores Lge	11- 8-42	Wilcox sand, Eoc.	10104	9270-	F 105 oil; 8.75 gas; 1/4"	44.3
Needville	Fort Bend	W. L. Goldston's Letitia Smith 1, 100-ac tr, F. Mading sur, A-524	1-14-42	Frio sand, Olig.	5263	5190-5194	F 231; 1/4"	24.1
North Aldine	Harris	Geo. W. Strake's Phoenix Dairy 1, w 40-ac tr of se1/4 of Peter Craft sur, A-201	3-28-42	Epon. Yegua sand; Eoc.	7991	7190-7193	F 36; 11/64"	48.2
North Bay City	Matagorda	Ohio Oil's E. L. McDonald 1, 100-ac tr in Jacob Betts Lg, A-7	8-18-42	Frio sand, Olig.	8688	7865-	F 310; 1/8"	34
South Buckeye	Matagorda	United North & South's L. V. Stoddard 7, 1189 ft e of e'ly line of L. L. Lambert 64-ac tr, 3458-ac tr	12-12-42	Frio sand, Olig.	8598	8107-	F 243; 7/64"	36.6
Mercy	San Jacinto	Shell's Central Coal & Coke 1, 990 ft fr ne & nwl sur, 5116-ac tr, Jas. Robinson sur A-45	1-27-42	Wilcox sand, Eoc.	8321	8270-	F 583; 1/4"	38
Camp Eleven	Tyler	American Republics Corp.'s Cushing Fee 1, 1400 ft s & e of nw cor of lge, 1¼ mi sw Joe Lake and 1½ mi ne Fred field	1- 9-42	Wilcox sand, Eoc.	8035	8024-	F 613; 1/4"	44.8
Ramer Island	Tyler	American Republics Corp.'s Cushing Fee 1, 10,524 ft fr w & 3547 ft fr nl Cushing lge, 640-ac tr	2-20-42	Cockfield sand, Eoc.	5406	5395-5397	F 57; 1/8"	45.7

UPPER TEXAS GULF COAST: DISTILLATE FIELDS

Sealy	Austin	Shell's Hintz 1, 990 ft fr sw 7 nwl of 167-ac tr Geo. T. Allen sur	6-19-42	Wilcox sand, Eoc.	11503	8724-8787	F 80; 7/64" & 20 mil	..
Alief	Harris	Pure's Albanese 1, 100-ac tr, Christian Williams sur	4- 4-42	Yegua sand, Eoc.	8637	7719-7724	F 54; 7/64" & 3.3 mil	52

UPPER TEXAS GULF COAST: GAS FIELD

Millican	Brazos	Phillips' Fritz Jericho 1, 660 ft fr n & w l of 77-ac tr, E. M. Millican sur	6- 5-42	Wilcox sand, Eoc.	3559	3342-3348	F 10.5 mil	gas

UPPER TEXAS GULF COAST: NEW OIL PAYS

Danbury Dome	Brazoria	Rowan Drlg. Co.'s Thos. Davis est. 18, 330 ft fr ne l of 1296-ac tr, Henry Austin sur	9- 1-42	Frio sand, Olig.	6199	5640-5655	F 153; 1/8"	40
Barbers Hill	Chambers	Mills Bennett's Gulf Fee 4-C, 230 ft fr s'ly n l of 61-ac tr, Wm. Bloodgood sur.	8-15-42	Miocene sand, Mio.	4719	3068-	F 145; 11/64"	32.1
Sour Lake	Hardin	Earl C. Hankamer's Charles G. Hooks 1, 389 ft fr e & w l of 12-ac tr, S. Jackson sur, se flank	9- 5-42	Miocene sand, Mio.	3083	2010-	F 125; 5/32"	20
Satsuma	Harris	Amerada's & Stanolind's Louis Dopslauf 1-A, 10-ac tr, Francis Fry sur, A-267	8-10-42	Cook Mt. sand, Eocene	7524	7265-	F 160; 1/8"	39.7
Stowell	Jefferson	Glenn H. McCarthy's Englin 1, 660 ft fr n & e l sec 158, TNO sur, A-651	3- 1-42	Frio sand, Olig.	9265	8446-	F 174; 1/4"	51
Stowell	Jefferson	Glenn H. McCarthy's Stewart 1, sw nw 157, TNO sur, A-371	3-18-42	Frio sand, Olig.	9300	9000-	F 792; 1/4"	34.8
Stowell	Jefferson	Sinclair-Prairie's Lizzie Gephart 1, 660 ft fr n & w ls 160-ac tr, TNO sur, sec 157, A-371	3-20-42	Frio sand, Olig.	9500	8656-	F 388; 1/4"	32.7
Hull	Liberty	Gulf's E. M. Scarborough 21, 660 ft fr w l IGN sur 28, A-435	1-10-42	Yegua sand, Eoc.	6015	5966-	F 333; 7/64"	34.1
Hull	Liberty	South Oil Co.'s Ambrose Merchant Est. 2-C, 150 ft fr s l & 235 ft fr e l lot 8, Merchant subdvn, J. Devore lge	1- 6-42	Yegua sand, Eoc.	6958	6376-	F 315; 1/8"	35.6
Hull	Liberty	South Oil Co.'s Ambrose Merchant Est. 15-B, 21-ac tr, Jesse Devore lge, 230 ft fr s & e l blk 7	1- 1-42	Yegua sand, Eoc.	6300	5920-	F 302; 1/8"	36.4
Lucky	Matagorda	Stanolind's J. E. Thompson 2, 990 ft s & w of No. 1 well on 588-ac tr, Elisha Hall sur	8-23-42	Frio sand, Olig.	9121	8565-8568	F 232; 1/4"	38.4
Lake Creek	Montgomery	Superior Oil Co of Calif.'s Eola Frost 1, 660 ft fr most w'ly w l and 800 ft fr s'ly n l of 1896-ac tr, A. Hodge sur A-18	9-24-42	Wilcox sand, Eoc.	13293	11508-11533	F 160; 11/64"	46.5
Lake Creek	Montgomery	Superior Oil Co. of Calif.'s S. Texas Dev. 1, 550 ft fr w & 2950 ft fr s l of 918-ac tr M. R. Goheen sur	4- 5-42	Wilcox sand, Eoc.	12259	9765-	F 213; 1/4"	52
Livingston	Polk	Gem Oil Co.'s Kavanagh & Collins 4, 467 ft fr sw & ne l 40-ac unit A Viesca 7 lge grant	9- 7-42	Sparta sand, Eoc.	8000	6294-	F 207; 1/4"	36.9
Livingston	Polk	Jordan Drlg. Co.'s Munson Est. 1, 40-ac tr A. Viesca 7 lge grant	6-15-42	Wilcox sand, Eoc.	7396	7020-	F 261; 1/4"	37
Fred	Tyler	Stanolind's Jas. Parker 2, 5940 ft fr e'ly w l & 1980 ft fr n l 3614-ac tr G. T. W. Collins lge	5- 2-42	Wilcox sand, Eoc.	10003	8612-8622	F 44; 1/4"	..

Lower Texas Gulf Coast

OIL FIELDS

Cadiz	Bee	Ike Howeth's Harris 1, Rivas gr	5-13-42	Vicksburg sand, Olig.	4714	3731	12 & 3 mil	43
Berclair	Bee	Magnolia's Buckner 1, w of Berclair	7- -42	Sandy shale	10561	5269-5275	F 48; 5/64"	44
Medio Creek	Bee	Shield Oil Co.'s Heard 1, Roach sur	3-24-42	Vicksburg sand, Olig.	5320	4854	20 & 3.8 mil	40.8
Tynan	Bee	Stanolind's Ludvika Ulke 1, 788 ft fr nw l Hiram Williams sur, 300-ac lse	12-30-42	Vicksburg sand, Olig.	4753	4197-	F 35; 1/8"	23
Buck Snag	Colorado	Shell's C. R. Schiurring 1, 1200 ft fr sw l & 1469 ft fr se l of 279-ac tr, IGN sur 6, A-314	8-28-42	Eponides Yegua sand, Eoc.	6997	6140-6145	F 116; 7/64" & 1.5 mil	47.3
Nordheim	DeWitt	Tide Water's F. G. Gips 1, 760 ft fr ne l & 2427 ft fr se l of 512-ac lse, Willis Moore sur, A-215	5-19-42	Wilcox sand, Eoc.	8500	7027-7030	F 80; 7/64"	36.2
Alamo	Hidalgo	McCollum & Lockhart's Sweeney 1, El Gate gr	4-11-42	Frio sand, Olig.	6567	5505-5953	200 & 30 mil	58,69.2
Penitas	Hildago	Arkansas Fuel's Heard 1, La Elidos gr	1-19-42	Frio sand, Olig.	6802	5922	12 & 1.3 mil	54.5
Stewart	Jackson	W. S. Boyle et al's Rose & Sample 1, Southerland sur, blk 5, 3 mi s of Ganado	8- -42	Fio & Marginulina sd, Olig.	6525	4987-4995	F 650; 1/4"	26.1
Collier	Jackson	Texas Co.'s Collier 2, 1980 ft fr sw l & 660 ft fr nw l 230-ac tr of 330-ac lse, Jas Kerr sur, A-39	11-16-42	Catahoula sand, Mio.	2455	2435-	F 202; 11/64"	23.6
Harmon	Jackson	Gulfboard Oil Corp's Harmon 1, sur 123	4-29-42	Frio sand, Olig.	6716	5353	104	28.8
Mayo	Jackson	Mayo & Boyle's Rodesney 1, Rambo sur	1- 7-42	Frio sand, Olig.	7808	5407	115	28.9
W. Mauritz	Jackson	Jno. B. Coffee's Mauritz & Bro 1, sur 121	4-21-42	Frio sand, Olig.	6753	5470	84	33.8
Mustang Creek	Jackson	Guy I. Warren's O. W. Freeman 1, 660 ft fr n & w ls 125-ac lse, Wm. Menefee sur A-53	11-16-42	Frio sand, Olig.	6651	6644-6648	F 115; 5/64"	31.8
Koopman	Jim Wells	Henshaw Bros' Koopman 1, sec 21	2-26-42	Frio sand, Olig.	6016	4112	210	44.5
Quinto	Jim Wells	Plymouth's Kuck 1, Casa Blanca gr	3- 7-42	Vicksburg sand, Olig.	5828	5067	5 mil	gas
Provident City	Lavaca	Shell's Neuhaus 1, Ragsdale sur	2- 1-42	Wilcox sand, Eoc.	10169	8746	91	48.8
Rooke	Refugio	Hewit & Dougherty's B. D. Rooke 6-A, 3890 ft e & 520 ft s of nw cor sec 40 Welder sub, but in J. M. & J. M.	2-28-42	Frio sand, Olig.	7656	7121-7145	F 357; 7/64"	39.1
S. Sinton	San Patricio	Tide Water's S. A. Loan & Trust 1, McAuley sur	1- 2-42	Frio sand, Olig.	6687	6662	50 & 4.5 mil	53.9

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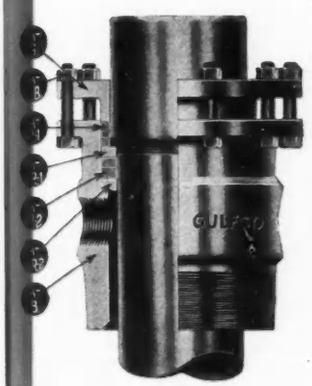
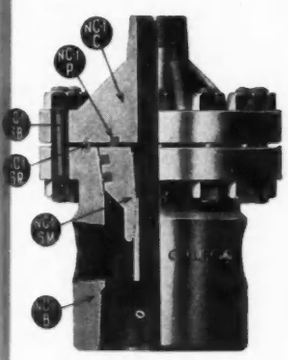
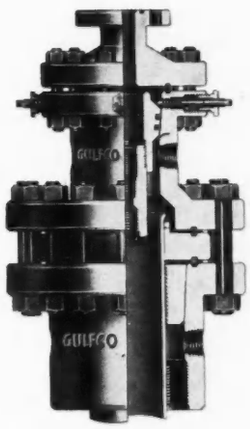




GULFCO WELL HEAD ASSEMBLIES



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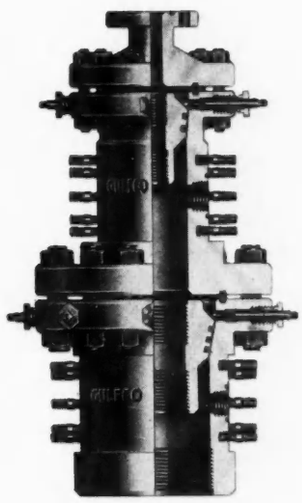

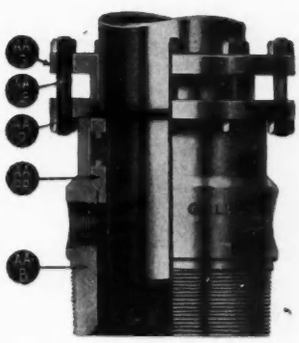

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DISCOVERY WELLS OF NEW FIELDS AND NEW PAY ZONES OPENED IN U. S. IN 1942

For explanation of data in "Initial Production" and "Producing Formation" columns—see note at beginning of tables, page 97.

Lower Texas Gulf Coast—Continued

GAS FIELDS

Field	County	COMPANY, WELL AND LOCATION	Date Completed	Name, Character and Age of Producing Formation	Total Depth (Feet)	Completion Horizon (Feet)	Initial Production, Method, and Choke	Gravity of Oil
Cistern	Fayette	Continental's Gabitzsch 1, Whiteside sur	6-10-42	Wilcox sand, Eoc.	4320	2808	38.5 mil	gas
Sarco Creek	Goliad	Ginther, Warren & Ginther's Carrie G. Wood 1, 1320 fr s l & 1400 fr se l 500-ac lse, Domingo Morris gr, A-25	10-29-42	Frio sand, Olig.	5253	4053-4086	180 mil; open	gas
S. W. Orange Grove (Roth)	Jim Wells	H. R. Smith & H. J. Mosser's Roth 1, 467 ft fr n & w ls tr 83, Geo. J. Reynolds sur 126	12-10-42	Frio sand, Olig.	5405	3245-3275	30 mil	gas
South Premont	Jim Wells	Shell's Jones 1, ½ mi se Premont townsite	8- -42	Sand, Olig.	7631	6040-6052 6062-6067	2.7 mil	gas

LOWER TEXAS GULF COAST: DISTILLATE FIELDS

North Pettus	Bee	Union Producing Co.'s G. A. Ray 58, 3425 fr nw l of 15,563 lse, R. C. Ballard sur	9-24-42	Wilcox sand, Eoc.	7010	6943-6963	F 37; 1/8"	61.3
Yorktown	Dewitt	Adams O. & G. Co.'s E. Berch 1, 760 ft n'ly ne l, 770 ft nw l, 710 ft se l 350-ac lse, J. Kimberling sur	4- 1-42	Carrizo-Wilcox sand, Eocene	9153	7192	F 180; ¼" & 6 mil	63

LOWER TEXAS GULF COAST: NEW OIL PAYS

S. Caesar	Bee	Luling O. & G. Co.'s Slick 1-W-B, Hodge sur	4-14-42	Carrizo sand, Eoc.	6673	6609	390	37.8
Sheridan	Colorado	Shell's Plow 4, Mayhar sur	4-15-42	Wilcox sand, Eoc.	10838	9360	173	56.4
Sheridan	Colorado	Shell's Plow 5, Mahar sur	6-21-42	Wilcox sand, Eoc.	11497	10168	135 & 35 mil	49
McAllen	Hidalgo	W. R. Davis Inc.'s Jackson-Harrison 1, Porc 64	1-10-42	Frio sand, Olig.	7682	7042	18 & 17 mil	56
Ganada	Jackson	Humble's Branch 5, sec 2	5-27-42	Frio sand, Olig.	6700	5518	130	29.5
Ganada	Jackson	The Texas Co.'s Hultquist 4, Dempsey sur	1-10-42	Frio sand, Olig.	7004	6625	168	43.6
Ganado	Jackson	The Texas Co.'s Tunison et al 4, sec 9	5-31-42	Frio sand, Olig.	7150	6563	665	34.4
Lolita	Jackson	Tide Water's L. Ranch Co. 1, 330 ft fr n & e ls lot 128, 161-ac tr, I&GN sur 19	11- 2-42	Marginulina sand, Olig.	5946	5716-5720	F 121; 3/8"	28.9
Mayo	Jackson	W. Stewart Boyle's Stroubal 1, Robertson sur	5-19-42	Frio sand, Olig.	5630	5331	155	27.8
North LaWard	Jackson	Magnolia's Gordin Est. 15, sec 3	4- 9-42	Frio sand, Olig.	7735	5627	35 & 0.4 mil	28
Stewart	Jackson	W. Stewart Boyle's H. A. Meyer 1, 660 ft fr n & e ls of 2-80-ac of 160-ac tr, Geo. Sutherland sur, A-75	8-20-42	Frio sand, Olig.	6155	5060-5072	F 49; 1/32"	25
North LaWard	Jackson	Magnolia's Moody 1	7- -42	Frio sand, Olig.	7620	6480-6487	.....	.....
Alice	Jim Wells	Southern Minerals' Stillwell 2, Collins subd	2-18-42	Yegua sand, Eoc.	7767	7767	127	49.6
Henshaw	Jim Wells	Rand Morgan's Fee 1-H, sec 1	1- 5-42	Frio sand, Olig.	5850	3778	21	33
Koopman	Jim Wells	Coastal Refineries' Wright 1	7- -42	Frio sand, Olig.	4692	4690-4692	1½ & gas	48
Quinto	Jim Wells	H. R. Smith's Koehler, Casa Blanca gr	6- 2-42	Frio sand, Olig.	5812	4860	162	29
Seeligson	Jim Wells	Magnolia's Seeligson 26, Ramirez gr	1- 7-42	Frio sand, Olig.	7013	6095	151	44.1
Stratton	Jim Wells	Humble's King Ranch-Arroyo 2, Farias gr	4-25-42	Frio sand, Olig.	7281	6758	127 & 6 mil	.....
Stratton	Jim Wells	Sam E. Wilson et al's S. A. Bank 1, secs 8 and 19	1- 2-42	Frio sand, Olig.	6600	6436	165	41.2
Refugio	Refugio	Sunray Oil Co.'s Mitchell 6, Refugio Town gr	5-24-42	Frio sand, Olig.	9378	8430	220 & 3 mil	58

LOWER TEXAS GULF COAST: NEW DISTILLATE PAYS

North LaWard	Jackson	Magnolia's Gordin Estate 19, 467 fr n & w l I&GN sur, 1029-ac tr, blk 4, C. S. Woolfolk Colonial Land Co subdvn	9-23-42	Frio sand, Olig.	6504	6250-6253	F 9; 1/16"	dist.
Seeligson	Jim Wells	Magnolia's A. A. Seeligson 29, 9863 ft e l, 660 ft s l, 20, 887-ac lse, Los Jarbincillas gr	4- 2-42	Frio sand, Olig.	7013	6120-6130	F gas, spray cond.	58

LOWER TEXAS GULF COAST: NEW GAS PAYS

Mayo	Jackson	Louis Croch's Stoner 1, Robertson sur	5-21-42	Frio sand, Olig.	5560	5100-	gas	gas
Texana	Jackson	Gulf's Simons et al 2, Wells lge	6-21-42	Frio sand, Olig.	7897	5703-	30 mil	gas

Southwest Texas

OIL FIELDS

Cadena	Duval	Taylor Ref. Co.'s Cadena 1, 660' fr s l & 1477' fr e l 210-ac lse, Calletano Rios sur 306	8-26-42	Pettus sand, Eoc.	5800	5260	P 76	44.1
Garza	Duval	Highland O. Co. et al's Garza 1, sur 524	1-15-42	Jackson sand, Eoc.	3322	3301	17	33
East	Jim Hogg	Sun's T. T. East 1-D, 3300' s'ly w l & 3300' fr s'ly n l of 4503-ac D lse, Santo Domingo de Arriba gr	10-13-42	Sand, L. Olig.	5303	4739-4740	F 8; 1/16"	51
Ulrich	Starr	Fidelity Oil & Royalty Co.'s Sugarland 1, 3 mi s Rincon	8- -42	Sand, Olig.	4200	3969-3972	F 77; 1/16"	45.8
Frost	Starr	Sun's Frost Bank 2-A, Porc 96	5-24-42	Frio sand, Olig.	5435	4184	32	45.1
Garcia	Starr	Sun's Garcia 1-A, Porc. 97	3- 7-42	Frio sand, Olig.	4075	3740	196	43.8
Lykes	Webb	Magnolia's D. C. R. C. 1, Z. C. S. L. lge 4	6-24-42	Jackson sand, Eoc.	2638	1952	15	20
McLean	Webb	O. W. Killam's McLean 1, sur 610	1-12-42	Yegua sand, Eoc.	4016	3238	168	54.1

SOUTHWEST TEXAS: GAS FIELD

Green Branch	McMullen	Quintana Pet. Co.'s South Texas 1-C, sec 25, 12 mi s Fowlerton	7- -42	Wilcox sand, Eoc.	7623	5720-5726	6 mil	gas

SOUTHWEST TEXAS: NEW OIL PAYS

Gov't. Wells	Duval	Sun's Wiederkehr 77-A, sur 55	1- 7-42	Jackson sand, Eoc.	2964	1818	81	24.2
Sejita	Duval	Trinity Gas Corp.'s Garcia 1, Charco Redondo gr	2-11-42	Jackson sand, Eoc.	5930	5780	132	44
Chaparosa	Jim Hogg	Adams, Neuhaus & Lucky's East 1, Randodo gr	1- 2-42	Pettus sand, Eoc.	3471	3463	102	47.6
Washburn	LaSalle	Quintana Petroleum Corp.'s South Texas Synd 13, 1200 ft n of sw cor on w l of JJ & AJ Dull sur 94, patent 507	8-20-42	Wilcox sand, Eoc.	5658	5096-5102	F 110; 1/8"	42.8
N. Sun	Starr	Sun's Garza 7, bet N. Sun and Kilsey Bass fields	8-16-42	.....	4586	4515-	159	48.3

SOUTHWEST TEXAS: NEW GAS PAY

Washburn	LaSalle	Quintana's South Tex. Synd. 10, sur 86	4-10-42	Wilcox sand, Eoc.	5552	5130	5 mil	gas

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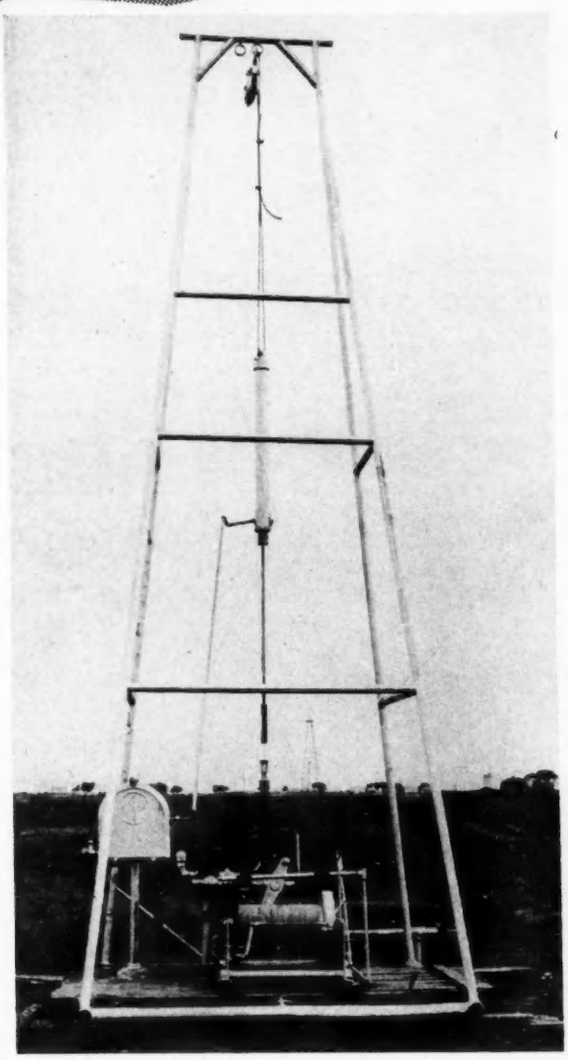

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DISCOVERY WELLS OF NEW FIELDS AND NEW PAY ZONES OPENED IN U. S. IN 1942

For explanation of data in "Initial Production" and "Producing Formation" columns—see note at beginning of tables, page 97.

South Central Texas

NEW FIELDS

Field	County	COMPANY, WELL AND LOCATION	Date Completed	Name, Character and Age of Producing Formation	Total Depth (Feet)	Completion Horizon (Feet)	Initial Production, Method, and Choke	Gravity of Oil
Imogene	Atascosa	Humble's M. L. Thompson 1, Lots 260 & 261, blk 19, Dr. Chas. Simmons subdvn, Peter McGreal sur	11- 5-42	Edwards lime, L. Cret.	7576	7570-7576	P 38	38.7
Pearsall T'nsite	Frio	Wiegand Bros.' Gilliam 1-A, sur 1	2-24-42	Austin chalk, U. Cret.	5380	4870	P 12	44
Poth	Wilson	Holland O. Co. et al's Boysen 1, sur 13	6-21-42	Wilcox sand, Eoc.	4410	4082	P 31	26.8

SOUTH CENTRAL TEXAS: NEW GAS PAY

Pendencia Creek	Dimmitt	Wellington's Sullivan 2-B, sec 606	4-25-42	Navarro sand, U. Cret.	2824	1886	0.5 mil	gas

Virginia

OIL FIELD

	Lee	Eisel et al's Fugate 1, 3 mi s of Rose Hill	6- 1-42	Trenton lime	1113	1111-1113	P 20	45.2

Wyoming

OIL FIELDS

Horse Creek	Laramie	General Pet. Corp.'s Govt. 78-31-G, sw se se 31-17n-68w	11-13-42	Lakota sand, L. Cret.	5531	5451-5489	586	31
North Hiawatha	Sweetwater	Vermillion Oil & Johnson & Horton's Govt. 1, sw ne ne 6-12n-99w	8- -42	Wasatch sand, Eoc.	3420	2627-2645	65	36.9

WYOMING: GAS FIELDS

Sherrard Dome	Carbon	Sinclair-Wyoming Oil Co.'s Carter 1, c ne se se 31-25n-88w	3- -42	Sherrard, Lakota sds, L. Cret.	5185	2024-2054 2950-2985	8 mil	gas
Elk Basin, South	Park	Mackinnie Oil & Drlg. Co.'s Northern Pacific 1, c nl nw nw 5-57n-99w	1-16-43	Cloverly, Lakota sds, L. Cret.	3157	3142-3157	3 mil	gas

WYOMING: NEW OIL PAYS

Pilot Butte	Freemont	Superior Oil Co.'s British-American's Tribal 1, se sw sw 15-3n-1w	3- 2-42	Tensleep sand, Penn.	6775	6184-6325	P 750	24.7
	Freemont	Superior's Stock 1, cel ne ne 21-3n-1w	9- 6-42	Embar lime, Permian	6750	6150-6210	P 500*	28
Elk Basin	Park	Minnelusa Oil Corp. & Yale Pet. Co.'s Henderson 1, ne ne ne 31-58n-99w	11- 2-42	Tensleep sand, Penn.	4538	4488-4538	F 1920	30
Cody Dome	Park	Husky Refining's Stump 2, se sw sw 21-53n-101w	.....	Tensleep sand, Penn.	4795	4625-4795	P 200	28

* Later went to water.

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Due to the paper shortage, THE OIL WEEKLY is deviating from its long-standing previous custom of incorporating its Annual Editorial Index in one of its regular issues mailed to all subscribers. The complete editorial index covering all issues of THE OIL WEEKLY published during 1942, bound separately in convenient pamphlet form, will be sent without charge to each subscriber requesting a copy.

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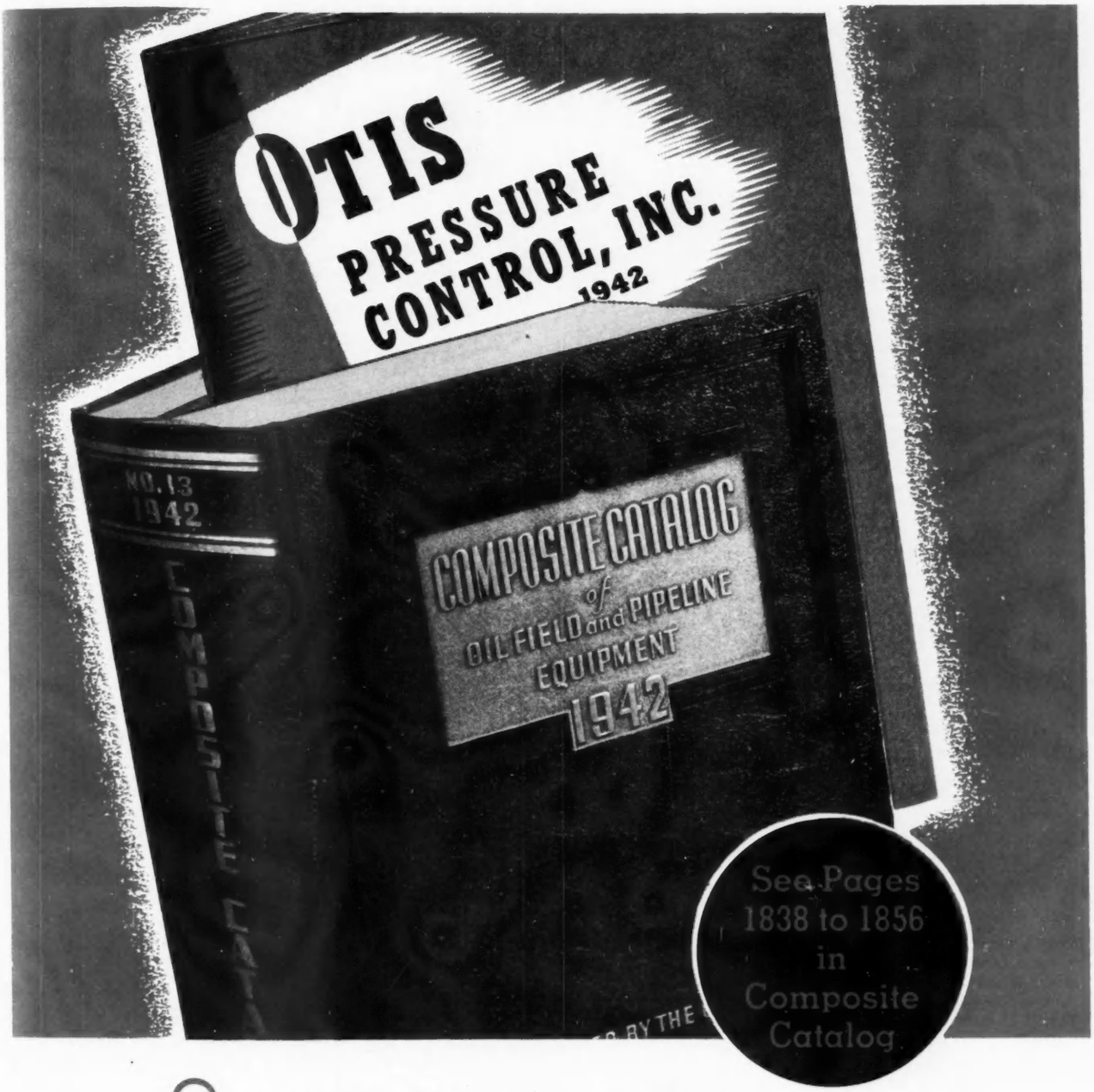

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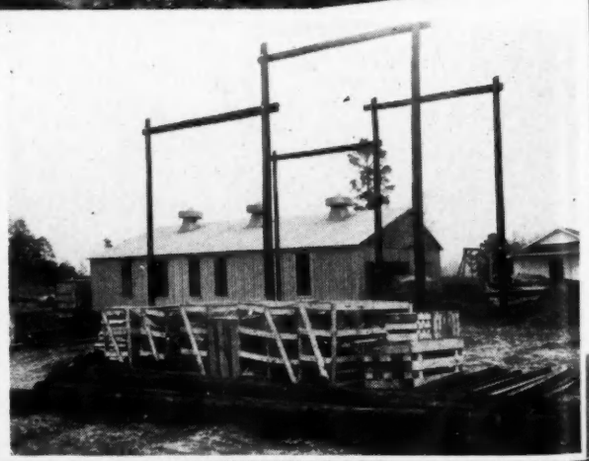

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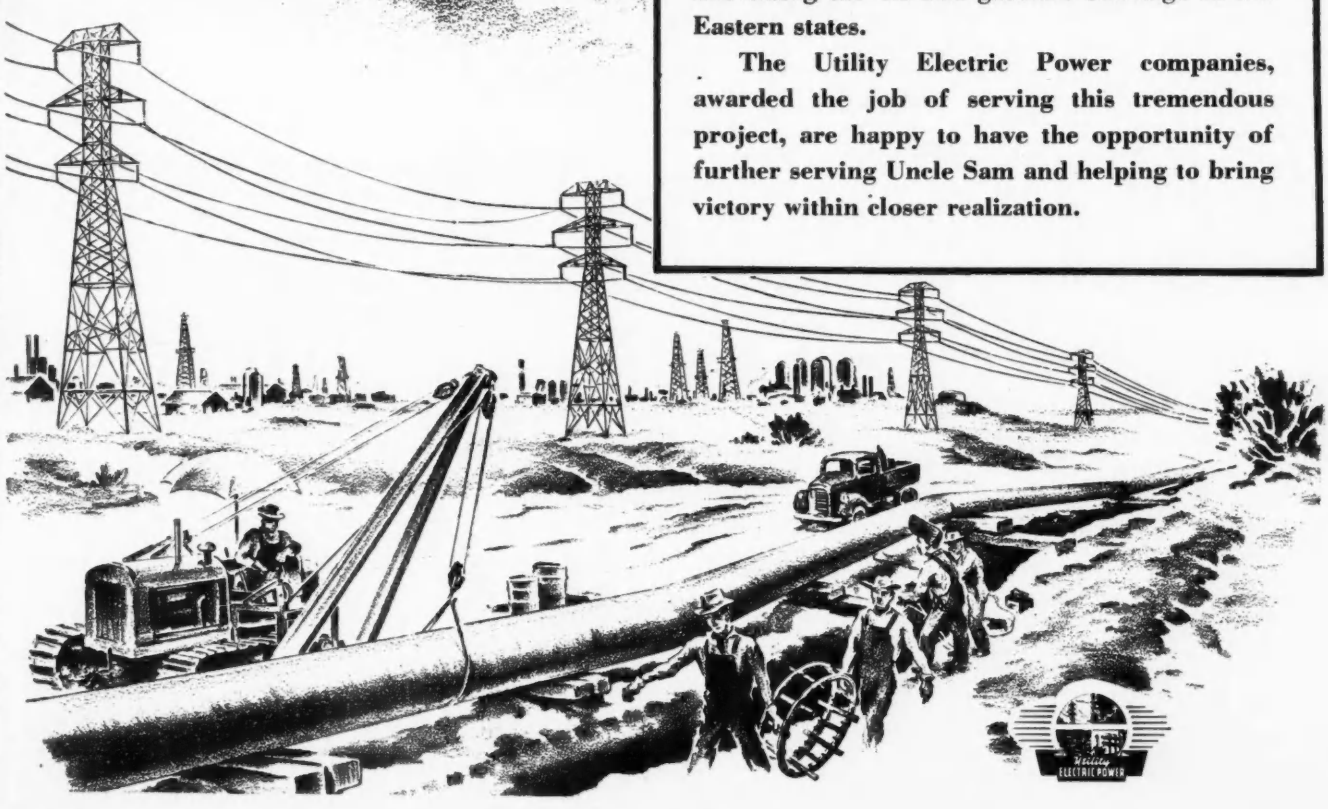
Electric drive involves the least quantity of scarce materials, particularly steel; lowers the cost of installed equipment, and permits direct connection of efficient high speed motors and pumps. Furthermore, it also permits the use of smaller station buildings, simplifies operation routine, and assures low maintenance costs, since instruments accurately record electric station operations. Most important of all for the early completion of the pipe line, is the fact that only electric motor drive could be produced under war conditions in the time required to enable the pipe line to be of real benefit in alleviating the oil and gasoline shortage in the Eastern states.

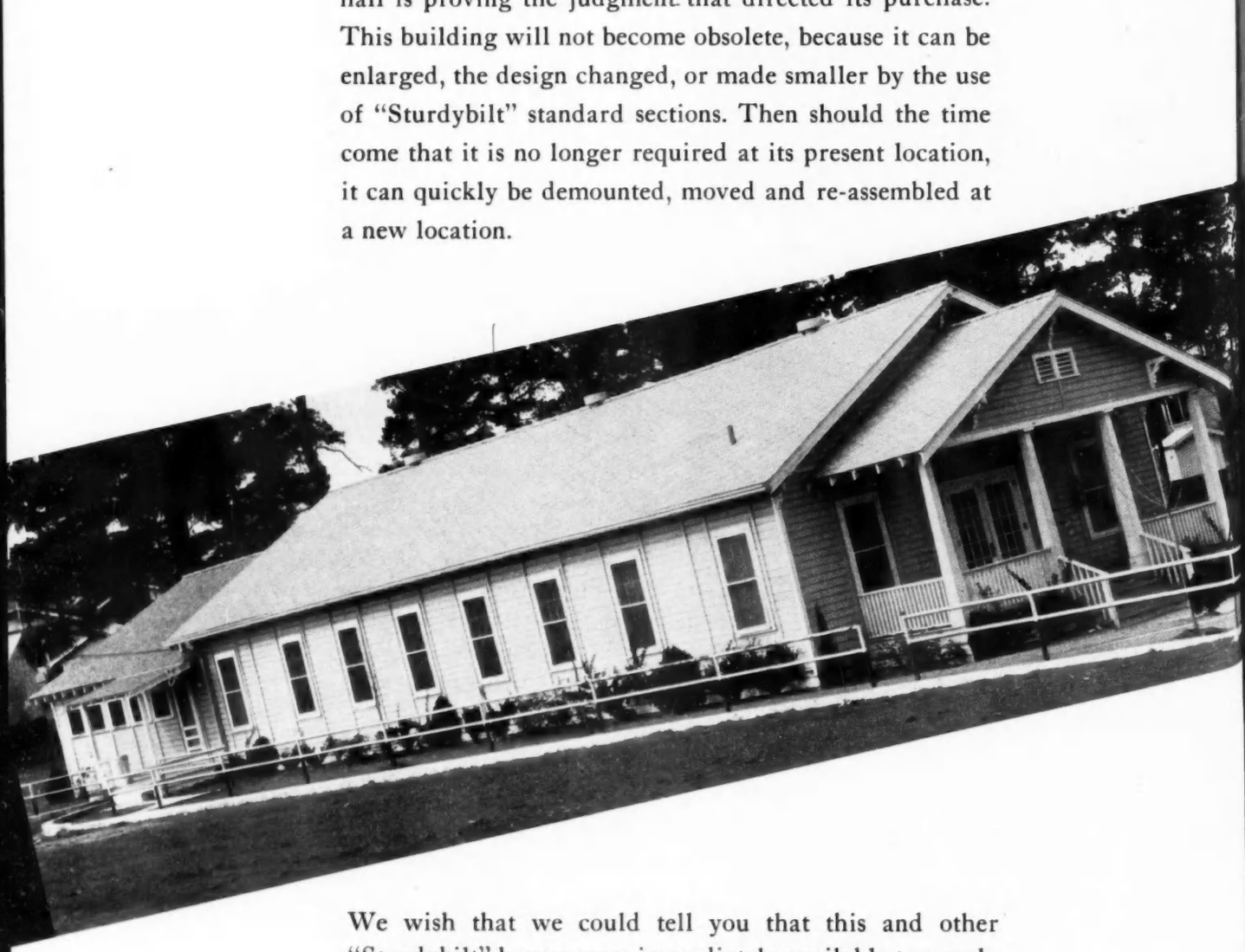
The Utility Electric Power companies, awarded the job of serving this tremendous project, are happy to have the opportunity of further serving Uncle Sam and helping to bring victory within closer realization.



Use Utility Electric Power!

PETROLEUM ELECTRIC POWER ASSOCIATION

ASSEMBLED in 1924 and still in excellent condition this "Sturdybilt" prefabricated, demountable Community hall is proving the judgment that directed its purchase. This building will not become obsolete, because it can be enlarged, the design changed, or made smaller by the use of "Sturdybilt" standard sections. Then should the time come that it is no longer required at its present location, it can quickly be demounted, moved and re-assembled at a new location.



We wish that we could tell you that this and other "Sturdybilt" houses were immediately available to supply your housing requirements — but they are not at present, except under certain conditions. So our suggestion is to make the greatest use possible of your "Sturdybilts" — don't let them remain vacant, move them to locations where additional housing facilities are required. If you can't spare the man power, we'll supply the necessary field crew and quickly make the move for you and re-assemble the unit, where desired, in new condition. And remember, also, it's cheaper to demount and move a "Sturdybilt" than to buy any other livable quarters.

SOUTHERN MILL & MANUFACTURING CO.

Wichita, Kansas **TULSA, OKLAHOMA** Longview, Texas

Producing Oil Wells, Crude Oil Production, and Well Completions in U. S. Fields

IN TABULATIONS published herewith, THE OIL WEEKLY presents salient production and drilling statistics on oil fields of the United States. In some areas, all fields are given, and in others, many of the more important fields.

These tables represent a new feature of the Yearbook-Forecast number, embodying production and well completion data heretofore published as separate features and also containing additional information, namely, the data on number of producing oil wells by fields, broken down where possible into wells flowing and wells on artificial lift.

The tables are designed for the greater convenience of the reader, putting together all the salient statistics on the individual fields, where available.

In the compilation of these statistics, the editorial staff of THE OIL WEEKLY had the benefit of the generous assistance of oil companies and men and women in the conservation departments of the different oil producing states, and to those who helped, sincere appreciation is extended.

United States Summary

COUNTY AND FIELD	Year Found	OIL PRODUCING WELLS AT END OF 1942			*CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
					Daily at End of 1942															
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Arkansas	1920	327	2,721	3,048	72,217	24	26,558,235	580,147,184	103	....	45	....	....	....	37	185	....	....	1	1
†California	1876	1,714	17,080	18,794	721,416	38	248,098,061	6,087,245,048	568	8	....	....	....	....	97	673	17	....	1	18
Colorado	1887	18	148	166	6,028	36	2,198,791	44,377,304	6	1	....	....	....	....	5	12	....	....	....	....
Illinois	1889	300	24,883	25,183	248,650	10	105,251,400	929,264,700	1,177	11	....	....	14	18	354	1,574	71	....	20	91
Indiana	1889	....	1,931	1,931	15,460	8	6,744,000	144,488,000	129	24	....	....	....	....	113	266	13	4	10	27
Kansas	1889	336	22,024	22,360	292,761	13	97,845,000	1,275,684,000	846	82	....	....	1	11	300	1,240	43	1	18	62
Kentucky	1860	....	14,300	14,300	15,300	1	4,198,000	176,121,000	69	2	....	....	1	....	58	130	3	....	2	5
†Louisiana	1902	2,396	4,924	7,320	334,290	46	‡123,811,167	‡1,289,906,701	585	40	11	....	....	....	171	807	....	....	....	....
Michigan	1900	235	2,835	3,070	64,360	21	21,574,903	183,168,189	310	75	....	....	....	....	119	504	....	....	1	1
Mississippi	1933	....	348	348	58,371	168	28,660,450	48,770,298	36	....	....	....	....	....	10	46	....	....	....	....
Missouri	1889	....	94	94	100	1	45,000	230,000	4	2	....	....	....	....	2	8	....	....	....	....
Montana	1916	....	2,244	2,244	22,521	10	7,993,801	99,155,778	126	46	....	....	....	....	18	190	....	....	....	....
Nebraska	1939	....	88	88	2,953	34	1,379,850	3,543,300	10	....	....	....	....	....	2	12	1	....	....	1
New Mexico	1913	2,821	1,004	3,825	94,031	337	31,679,549	346,228,308	261	12	....	....	....	....	62	335	7	....	....	7
New York	1864	....	21,300	21,300	15,000	0.7	5,451,000	139,823,000	711	6	....	502	....	....	9	1,228	....	....	....	....
Ohio	1860	....	25,600	25,600	9,300	0.4	3,599,000	595,316,000	235	510	....	....	7	....	359	1,111	6	13	4	23
Oklahoma	1891	400	52,611	53,011	367,925	7	140,234,925	5,058,547,025	625	95	....	2	19	12	319	1,072	100	11	37	148
Pennsylvania	1859	....	84,800	84,800	48,400	0.6	17,984,000	1,021,392,000	1,802	285	....	1,620	....	....	111	3,818	2	19	6	27
Tennessee	1876	....	30	30	32	1	12,000	427,000	....	2	....	....	....	....	....	2	....	....	....	....
†Texas	1896	38,681	60,504	99,185	1,356,945	14	478,436,230	7,653,740,345	3,155	170	49	17	27	5	743	4,166	87	6	30	123
Utah	1912	....	5	5	16	3	6,381	202,006	....	....	....	....	....	....	....	....	....	....	....	....
West Virginia	1860	....	17,900	17,900	8,900	0.5	3,663,000	417,866,000	118	494	....	....	....	....	99	711	4	44	5	53
Wyoming	1894	104	2,836	2,940	92,407	31	32,835,060	560,473,489	78	5	....	....	1	....	7	91	1	....	....	1
Total United States	....	47,332	360,210	407,542	3,847,383	9.4	1,388,259,803	26,656,116,675	10,954	1,870	105	2,141	70	46	2,995	18,181	355	98	135	588

* Production figures as given here by individual fields, being from various sources, differ slightly from those in table of United States, by states, by years, which are from Bureau of Mines. † Summary of state by major districts given at beginning of details by fields. ‡ Including for 1942, in Louisiana, about 4,350,000 barrels of condensate production and about 3,050,000 barrels of allowable production not actually produced. After these deductions, indicated crude production for Louisiana was about 116,400,000 barrels, or 7,400,000 barrels less than figure here shown.

Arkansas

(Data compiled with assistance of Arkansas Oil and Gas Commission, El Dorado)

Columbia:																				
Atlanta	1938	20	2	22	2,898	132	1,046,283	2,894,714	3	....	....	....	....	....	....	3	....	....	....	....
Big Creek	1940	....	1	1	151	151	49,085	117,115	....	....	....	....	....	....	1	1	....	....	....	....
Buckner	1937	11	17	28	2,233	80	775,880	3,433,281	....	....	....	....	....	....	....	....	....	....	....	....
Columbia, Lime	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....
Dorcheat, Lime	1939	25	....	25	1,200	48	565,404	1,690,232	....	....	8	....	....	....	....	8	....	....	....	....
Dorcheat, Cotton Valley	1942	10	....	10	150	15	32,343	32,343	1	....	19	....	....	....	....	10	....	....	....	....
Macedonia, Lime	1941	18	....	18	850	47	362,413	491,975	....	....	13	....	....	....	....	13	....	....	....	....
Macedonia, Cotton Valley	1942	9	....	9	76	8	9,476	9,476	11	....	18	....	....	....	....	9	....	....	....	....
Magnolia	1938	106	9	115	17,241	150	6,373,114	24,598,896	....	....	....	....	....	....	....	....	....	....	....	....
Stephens-Smart	1922	....	....	....	....	....	....	....	15	....	....	....	....	....	5	20	....	....	....	....
Village	1938	12	....	12	1,323	110	425,255	1,587,537	1	....	....	....	....	....	....	1	....	....	....	....
Fayette:																				
Bradley	1925	....	....	....	....	....	....	186,705	....	....	....	....	....	....	....	....	....	....	....	....
Buckner	1937	....	....	....	....	....	....	....	1	....	....	....	....	....	1	2	....	....	....	....
Lewisville	1939	....	18	18	158	9	64,344	530,571	....	....	....	....	....	....	....	....	....	....	....	....
McKamie, Lime	1940	18	....	18	1,200	67	723,194	1,694,901	....	....	4	....	....	....	1	5	....	....	....	....
McKamie, Cotton Valley	1942	1	....	1	109	109	20,254	20,254	21	....	....	....	....	....	....	1	....	....	....	....
Midway	1942	31	....	31	4,548	147	1,165,716	1,165,716	31	....	....	....	....	....	11	42	....	....	....	....
Patton	1941	1	....	1	200	200	20,491	33,283	....	....	1	....	....	....	....	1	....	....	....	....
Miller:																				
Fouke	1940	....	10	10	114	11	333,778	535,748	7	....	....	....	....	....	3	10	....	....	....	....
Garland City	1932	....	9	9	236	26	86,332	2,128,807	....	....	....	....	....	....	....	....	....	....	....	....
Rodessa	1937	....	60	60	836	14	371,839	6,680,273	....	....	....	....	....	....	....	....	....	....	....	....
Texarkana	1942	1	....	1	100	100	11,583	11,583	....	....	1	....	....	....	....	1	....	....	....	....
Nevada:																				
Irma-Troy	1921	....	116	116	1,489	13	588,492	9,619,491	3	....	....	....	....	....	....	3	....	....	....	....
Ouachita:																				
Camden	1934	....	....	....	....	....	....	37,850	....	....	....	....	....	....	1	1	....	....	....	....
Mt. Holly (McDonald	1929	....	....	....	....	....	....	117,085	....	....	....	....	....	....	....	....	....	....	....	....
Smackover-Snow Hill	1922	....	1,600	1,600	13,200	8	4,911,530	394,215,899	3	....	....	....	....	....	2	5	....	....	....	....
*Stephens	1922	....	213	213	1,992	9	603,925	7,405,855	2	....	....	....	....	....	3	5	....	....	....	....

Continued on page 130

Arkansas—Continued

COUNTY AND FIELD	Year Found	[c]OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	[c]Daily at End of 1942 Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Union:																				
[3]Champagnolle	1927	.....	75	75	677	9	266,396	15,222,752	3	...	...	...	...	...	1	4	...	...	...	...
El Dorado, East	1921	.....	58	58	380	7	128,303	9,645,894	8	...	...	...	...	...	...	8	...	...	...	...
El Dorado, South	1920	.....	187	187	932	5	370,976	48,729,543	...	...	...	...	...	...	2	2	...	...	1	1
Lisbon	1925	.....	143	143	148	1	58,532	6,833,531	...	...	...	...	...	...	...	...	...	...	...	...
Mount Holly	1941	.....	5	5	380	76	135,055	145,478	4	...	...	...	...	...	1	5	...	...	...	...
New London	1942	7	.....	7	310	44	53,433	53,433	9	...	...	...	...	...	2	11	...	...	...	...
Nick-Springs	1940	.....	13	13	300	23	131,532	618,664	...	...	...	...	...	...	...	...	...	...	...	...
Schuler, Cotton Valley	1942	7	.....	7	700	100	203,559	203,659	5	...	...	...	...	...	...	5	...	...	...	...
Schuler, East	1941	6	.....	6	599	100	198,602	234,924	3	...	...	...	...	...	2	5	...	...	...	...
Schuler-Jones	1937	40	*94	*134	12,000	90	4,490,387	25,491,584	...	...	...	...	...	...	...	...	...	...	...	...
Schuler-Morgan	1937	.....	14	14	628	45	238,308	2,529,734	...	...	...	...	...	...	...	...	...	...	...	...
Schuler-Reynolds		.....	15	15	2,254	150	797,981	4,009,647	...	...	...	...	...	...	...	...	...	...	...	...
Smackover	1922	.....	.....	.....	.....	.....	.....	[6]	1	...	...	...	...	...	...	1	...	...	...	...
Urbana	1929	.....	47	47	1,180	25	465,568	6,718,979	...	...	...	...	...	...	1	1	...	...	...	...
Urbana-Crain	1942	4	15	19	1,425	75	478,872	478,872	[5]1	...	...	...	...	...	...	1	...	...	...	...
Total Arkansas	....	327	*2,721	*3,048	72,217	24	26,558,235	580,147,184	103	...	45	...	*	...	37	185	...	...	1	1

* Includes 94 Schuler-Jones wells shut-in under operation of unit. [1] Dual completed in Cotton Valley and Lime. [2] Plug back to C. V. from Lime. [3] Rainbow field included. [4] Old Stevens Pool. [5] Plug back from Urbana sand. [6] Data under Ouachita County.

California

(Data compiled with assistance of American Petroleum Institute reports and with cooperation of Conservation Committee of California Oil Producers)

SUMMARY:																				
San Joaquin Valley	....	818	9,302	10,120	299,053	30	104,411,286	2,569,827,783	367	5	...	...	...	...	57	429	1	...	1	2
Coastal District	....	305	1,476	1,781	109,362	61	32,859,725	613,283,799	70	...	...	...	...	...	27	97	1	...	...	1
Los Angeles Basin	....	591	6,302	6,893	313,001	45	110,827,050	2,903,023,130	131	3	...	...	...	...	13	147	15	...	...	15
Unclassified	....	.....	.....	.....	.....	.....	.....	1,110,336	....	...	...	...	...	...	....	.....	...	...	...	...
Total California	....	1,714	17,080	18,794	721,416	38	248,098,061	6,087,245,048	568	8	...	...	...	...	97	673	17	...	1	18
San Joaquin Valley																				
Kern:																				
Antelope Hills	1942	1	4	5	328	66	84,842	84,842	10	1	...	...	...	...	.....	11	...	...	...	...
Arvin	1939	.....	2	2	41	21	202,910	1,553,550	1	...	...	...	...	...	.....	1	...	...	...	...
Belridge, North	1934	36	20	56	4,303	77	1,907,514	32,941,024	4	1	...	...	...	...	.....	5	...	...	...	...
Belridge, South	1934	2	270	272	3,339	12	977,598	6,373,286	94	...	...	...	...	...	.....	94	...	...	...	...
Canal	1937	25	9	34	2,429	71	1,029,930	7,614,978	1	...	...	...	...	...	.....	1	...	...	...	...
Canfield Ranch	1938	.....	1	1	22	22	12,114	100,312	...	...	...	...	...	...	.....	.....	...	...	...	...
Coalinga:	1896	204	1,153	1,357	62,842	46	19,235,599	405,374,883	45	...	...	...	...	...	5	50	1	...	1	2
Coalinga, East	....	.....	.....	.....	.....	.....	.....	.....	18	...	...	...	...	...	1	19	...	...	...	...
Coalinga, Nose	....	.....	.....	.....	.....	.....	.....	.....	4	...	...	...	...	...	.....	4	...	...	...	...
Coalinga, West	....	.....	.....	.....	.....	.....	.....	.....	13	...	...	...	...	...	3	16	...	...	...	...
Coalinga, Unclassified	....	.....	.....	.....	.....	.....	.....	.....	10	...	...	...	...	...	1	11	1	...	1	2
*Cole's Levee	1938	115	8	123	16,943	138	5,282,550	14,126,940	14	...	...	...	...	...	1	15	...	...	...	...
Dyer Creek	1941	.....	1	1	56	56	16,306	18,841	...	...	...	...	...	...	1	1	...	...	...	...
Edison	1934	.....	111	111	2,716	24	1,027,698	9,564,585	3	...	...	...	...	...	3	6	...	...	...	...
Elk Hills	1919	3	206	209	13,069	63	4,388,808	162,184,774	4	2	...	...	...	...	.....	6	...	...	...	...
Fruitvale	1928	17	146	163	6,300	39	2,324,656	27,048,221	....	...	...	...	...	...	1	1	...	...	...	...
Greeley	1936	34	44	78	6,461	83	2,461,887	8,924,449	10	...	...	...	...	...	.....	10	...	...	...	...
Helm	1941	4	.....	4	261	65	70,069	72,619	8	...	...	...	...	...	.....	8	...	...	...	...
Jacalitos	1941	5	.....	5	211	42	56,007	59,238	5	...	...	...	...	...	2	7	...	...	...	...
Kern River	1900	.....	2,456	2,456	15,868	6	5,751,518	334,428,017	23	...	...	...	...	...	8	31	...	...	...	...
Lost Hills	1934	.....	366	366	3,759	103	1,406,143	12,580,445	3	...	...	...	...	...	.....	3	...	...	...	...
Lost Hills, Belridge	1910	.....	.....	.....	.....	.....	.....	70,887,784	....	...	...	...	...	...	.....	.....	...	...	...	...
McKittrick	1898	1	283	284	4,878	17	1,804,158	94,204,681	2	...	...	...	...	...	6	8	...	...	...	...
Midway-Sunset	1901	2	3,228	3,230	55,872	17	20,475,029	930,947,190	57	...	...	...	...	...	14	71	...	...	...	...
Mountain View	1933	1	155	156	4,354	28	1,609,154	41,577,138	...	...	...	...	...	...	1	1	...	...	...	...
Mount Poso	1927	.....	404	404	20,368	50	7,598,135	62,911,449	27	...	...	...	...	...	6	33	...	...	...	...
Paloma	1939	2	.....	2	860	430	277,300	486,781	3	...	...	...	...	...	.....	3	...	...	...	...
Raisin City	1941	9	.....	9	906	101	300,990	363,509	4	1	...	...	...	...	2	7	...	...	...	...
Rio Bravo	1937	96	.....	96	7,315	76	3,434,899	16,220,546	2	...	...	...	...	...	1	3	...	...	...	...
Riverdale	1941	9	.....	9	375	42	81,513	83,762	11	...	...	...	...	...	1	12	...	...	...	...
Round Mountain	1927	.....	246	246	11,154	45	3,944,177	35,142,718	11	...	...	...	...	...	5	16	...	...	...	...
Shafter	1941	.....	2	2	95	48	20,782	33,011	1	...	...	...	...	...	.....	1	...	...	...	...
Strand	1939	12	.....	12	980	82	406,949	1,616,330	1	...	...	...	...	...	.....	1	...	...	...	...
Strand, East	1942	.....	.....	*	*	*	3,682	3,682	2	...	...	...	...	...	.....	2	...	...	...	...
Ten Section	1936	117	3	120	12,477	104	4,641,551	20,232,225	5	...	...	...	...	...	.....	5	...	...	...	...
Union Avenue	1941	.....	4	4	145	36	69,411	118,885	2	...	...	...	...	...	.....	2	...	...	...	...
Wasco	1938	10	3	13	961	74	434,976	2,153,806	...	...	...	...	...	...	.....	.....	...	...	...	...
Wheatville	....	.....	.....	.....	.....	.....	2,230	2,230	1	...	...	...	...	...	.....	1	...	...	...	...
Wheeler Ridge	1923	.....	34	34	268	8	99,261	4,020,838	....	...	...	...	...	...	.....	.....	...	...	...	...
Kings:																				
Kettleman, Middle Dome	1932	.....	.....	.....	.....	.....	.....	544,491	...	...	...	...	...	...	.....	.....	...	...	...	...
Kettleman, North Dome	1928	113	132	245	39,022	159	12,970,940	265,225,723	13	...	...	...	...	...	.....	13	...	...	...	...
Chico Martinez	....	.....	3	3	23	8	.....	.....	...	...	...	...	...	...	.....	.....	...	...	...	...
Devils Den	....	.....	3	3	2	1	.....	.....	...	...	...	...	...	...	.....	.....	...	...	...	...
Grapevine	....	.....	1	1	16	16	.....	.....	...	...	...	...	...	...	.....	.....	...	...	...	...
Pyramid Hills	....	.....	4	4	34	9	.....	.....	...	...	...	...	...	...	.....	.....	...	...	...	...
Total San Joaquin Valley	....	818	9,302	10,120	299,053	30	104,411,286	2,569,827,783	367	5	...	...	...	...	57	429	1	...	1	2
Coastal District																				
Santa Barbara:																				
Capitan	1929	.....	53	53	4,449	84	848,377	6,496,231	...	...	...	...	...	...	.....	.....	...	...	...	...
Elwood, Goleta	1927	2	64	66	2,918	44	861,067	69,315,477	...	...	...	...	...	...	.....	.....	...	...	...	...
Gato Ridge	1931	.....	.....	.....	.....	.....	1,215,402	1,215,402	3	...	...	...	...	...	.....	3	...	...	...	...
Padre Canyon	1936	.....	.....	.....	.....	.....	355,751	355,751	...	...	...	...	...	...	.....	.....	...	...	...	...
San Martinez	1941	.....	.....	.....	.....	.....	233,835	233,835	6	...	...	...	...	...	1	7	...	...	...	...
Santa Barbara	1929	.....	22	22	153	7	60,421	3,524,012	...	...	...	...	...	...	1	1	...	...	...	...
Santa Maria-Lompoc	1902	51	451	502	39,903	79	2,748,568	159,253,399	5	...	...	...	...	...	1	6	1	...	...	1
Santa Maria Valley	1940	.....	.....	.....	.....	.....	7,600,466	20,604,869	28	...	...	...	...	...	4	32	...	...	...	...
Summerland	1894	.....	3	3	11	4	5,235	3,176,334	....	...	...	...	...	...	1	1	...	...	...	...

[c] California data for October. * No production in October; field opened 11-29-42.

Continued on page 132

VICTORY LIES THIS WAY...

VICTORY lies in the greater production of oil . . . in fast, effective drilling . . . in reconditioning, straightening and re-drilling of old wells . . . in saving precious time and equipment.

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The SYFO Clinograph

The E-C (Electro-Chemical) Inclinometer

The H-K Inclinometer

The H-K Directional Magnetic Single Shot

M-M-O Bottom Hole Orientation

K-K Whipstock and Removal Sub

The SURWEL Gyroscopic Clinograph

Polar Core Orientation Service

SPERRY-SUN WELL SURVEYING CO., 1608 WALNUT ST., PHILA., PA.

BRANCH OFFICES:

HOUSTON, ODESSA, CORPUS CHRISTI, TEXAS — OKLAHOMA CITY, OKLA. — LONG BEACH AND BAKERSFIELD, CALIF. — LAFAYETTE, LA.

California—Continued

COUNTY AND FIELD	Year Found	©OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	©Daily at End of 1942 Whole Field	©Daily at End of 1942 Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Ventura:																				
Holser Canyon	1942	....	....	....	....	....	....	....	1	...	...	...	...	...	...	1	...	...	...	....
Rincon	1927	9	60	69	3,355	49	1,014,417	15,123,504	...	...	...	...	...	...	1	1	...	...	...	....
San Miguelito	1931	29	16	45	5,067	113	1,232,621	8,777,314	3	...	...	...	...	...	...	3	...	...	...	....
Ventura Avenue	1926	162	239	401	42,517	106	13,636,650	241,332,536	17	...	...	...	...	...	1	18	...	...	...	....
Ventura Co. and New Hall	prior to 1876	52	551	603	10,948	18	3,037,745	83,594,992	7	...	...	...	...	...	17	24	...	...	...	....
Watsonville	1923	....	8	8	26	3	9,170	380,143	...	...	...	...	...	...	...	.....	...	...	...	....
San Luis Obispo: Unclassified	....	....	9	9	15	2	.....	.....	....	...	...	...	...	...	....	.....	...	...	...	....
Total Coastal District	....	305	1,476	1,781	109,362	61	32,859,725	613,283,799	70	...	...	...	...	...	27	97	1	...	...	1
Los Angeles Basin																				
Los Angeles:																				
Aliso Canyon	....	7	12	19	2,307	121	721,567	721,567	....	...	...	...	...	...	....	.....	...	...	...	....
Aliso	1938	....	....	....	....	....	.....	.....	3	2	...	...	...	...	1	6	...	...	...	....
Coyote, East	1911	1	131	132	6,073	46	2,084,661	45,073,563	4	...	...	...	...	...	1	5	...	...	...	....
Coyote, West	1909	9	105	114	11,312	99	3,774,144	129,850,369	2	...	...	...	...	...	....	2	...	...	...	....
Del Valle	1940	....	....	....	....	....	268,408	268,408	2	...	...	...	...	...	....	2	...	...	...	....
Domingues	1923	51	247	298	23,681	79	7,911,696	138,268,799	5	...	...	...	...	...	1	6	3	...	...	3
El Segundo	1936	....	35	35	1,136	32	433,839	10,567,173	...	...	...	...	...	...	....	.....	...	...	...	....
Inglewood	1924	39	241	280	19,187	69	6,763,872	132,582,884	4	...	...	...	...	...	1	5	...	...	...	....
Lawndale	1928	....	3	3	27	9	9,844	1,132,359	...	...	...	...	...	...	....	.....	...	...	...	....
Long Beach	1921	....	1,216	1,216	34,347	28	13,135,518	680,117,701	1	...	...	...	...	...	2	3	...	...	...	....
Los Angeles & Salt Lake	1894	....	93	93	507	5	200,900	66,529,544	...	...	...	...	...	...	....	.....	...	...	...	....
Montebello	1917	14	337	351	10,891	31	3,981,338	131,404,110	5	...	...	...	...	...	....	5	...	...	...	....
Oak Canyon	1941	....	....	....	....	....	143,640	143,640	2	...	...	...	...	...	1	3	...	...	...	....
Playa del Rey	1929	....	134	134	3,069	23	1,229,877	49,335,258	...	...	...	...	...	...	....	.....	...	...	...	....
Potrero	1927	6	17	23	700	30	307,987	4,613,621	9	...	...	...	...	...	....	9	...	...	...	....
Rosecrans	1924	13	175	188	7,120	38	2,730,428	51,045,317	4	...	...	...	...	...	2	6	...	...	...	....
Santa Fe Springs	1921	....	577	577	21,729	38	7,807,231	482,462,980	1	...	...	...	...	...	....	1	...	...	...	....
Seal Beach	1926	8	123	131	8,601	66	3,054,418	92,945,468	1	...	...	...	...	...	....	1	1	...	...	1
Torrance	1922	....	635	635	7,972	13	3,066,766	107,810,891	11	...	...	...	...	...	....	11	...	...	...	....
Turnbull	1941	1	2	3	427	142	112,061	123,984	3	...	...	...	...	...	....	3	...	...	...	....
Whittier	1912	1	164	165	1,090	7	374,596	18,740,636	...	1	...	...	...	...	2	3	...	...	...	....
Wilmington	1937	410	684	1,094	94,907	87	33,685,637	174,007,278	40	...	...	...	...	...	....	40	11	...	...	11
Yorba Linda	....	....	....	....	....	....	63,060	63,060	5	...	...	...	...	...	....	5	...	...	...	....
Orange:																				
Brea-Olinda	1897	8	410	418	13,003	31	3,740,987	172,791,139	4	...	...	...	...	...	....	4	...	...	...	....
Buena Park	1942	....	....	....	....	....	39,991	39,991	3	...	...	...	...	...	1	4	...	...	...	....
Huntington Beach	1920	23	660	683	37,549	55	12,277,748	313,810,973	22	...	...	...	...	...	....	22	...	...	...	....
Newport	1925	....	....	....	....	....	.....	129,120	....	...	...	...	...	...	....	.....	...	...	...	....
Richfield	1919	....	301	301	7,366	24	2,906,836	98,443,297	....	...	...	...	...	...	1	1	...	...	...	....
Total Los Angeles Basin	....	591	6,302	6,893	313,001	45	110,827,050	2,903,023,130	131	3	...	...	...	...	13	147	15	...	...	15

© California data for October.

Colorado

Archuleta:																				
Price	1934	.....	9	9	458	51	317,061	1,506,492	....	...	...	...	...	...	.....	.....	...	...	...	....
Boulder:																				
Boulder	1902	.....	7	7	10	1	4,602	659,279	....	...	...	...	...	...	.....	.....	...	...	...	....
Cheyenne:																				
Unclassified	....	.....	.....	.....	.....	.....	.....	.....	....	...	...	...	...	...	2	2	...	...	...	....
Fremont:																				
Florence—Canon City	1862	.....	51	51	127	2	46,049	13,778,806	....	...	...	...	...	...	.....	.....	...	...	...	....
Jackson:																				
Walden	1927	.....	.....	.....	.....	.....	Shut-in	85,336	....	...	...	...	...	...	.....	.....	...	...	...	....
Kiowa:																				
Miscellaneous	....	.....	.....	.....	.....	.....	.....	.....	....	...	...	...	...	...	1	1	...	...	...	....
Larimer:																				
Berthoud	1927	.....	1	1	8	8	2,965	63,297	....	...	...	...	...	...	.....	.....	...	...	...	....
Ft. Collins	1923	.....	6	6	93	16	32,868	2,264,915	....	...	...	...	...	...	.....	.....	...	...	...	....
Wellington	1924	.....	8	8	210	26	62,780	4,983,926	....	...	...	...	...	...	.....	.....	...	...	...	....
Moffat:																				
Hamilton	1924	.....	11	11	336	31	127,815	5,924,871	....	...	...	...	...	...	.....	.....	...	...	...	....
E. Hiawatha	1928	8	.....	8	524	66	175,187	513,991	2	...	...	...	...	...	.....	2	...	...	...	....
Iles	1924	.....	24	24	1,423	59	547,196	9,621,045	....	...	...	...	...	...	.....	.....	...	...	...	....
Powder Wash	1931	.....	2	2	78	39	36,813	76,967	....	1	...	...	...	...	.....	1	...	...	...	....
Prowers:																				
Holly	....	.....	.....	.....	.....	.....	.....	.....	....	...	...	...	...	...	1	1	...	...	...	....
Rio Blanco:																				
Rangely	1919	.....	18	18	816	45	270,044	1,243,256	1	...	...	...	...	...	1	2	...	...	...	....
Wilson Creek	1938	10	.....	10	1,821	182	539,354	1,410,624	3	...	...	...	...	...	.....	3	...	...	...	....
Routt:																				
Tow Creek	1924	.....	10	10	124	12	36,057	1,773,705	....	...	...	...	...	...	.....	.....	...	...	...	....
Weld:																				
Greasewood	1930	.....	1	1	.....	.....	Shut-in	470,794	....	...	...	...	...	...	.....	.....	...	...	...	....
Total Colorado	....	18	148	166	6,028	36	2,198,791	44,377,304	6	1	...	...	...	...	5	12	...	...	...	....

Illinois

(Data on Well Completions Based on Monthly Drilling Report of Illinois Geological Survey, Oil and Gas Division, Urbana)

SUMMARY—																				
Eastern Illinois (Stripper Area)	....	.....	13,136	13,136	10,571	1	3,719,700	436,741,400	4	...	...	...	1	...	6	11	...	...	3	3
Northwestern Illinois (Stripper Area)	....	.....	200	200	300	1½	100,000	2,887,000	....	...	...	...	...	...	.....	.....	...	...	...	....
Illinois Basin (Old Pools)	....	.....	347	347	379	1	424,500	9,264,500	6	...	...	...	...	...	2	8	...	...	...	....
Illinois Basin (New Pools)	....	*300	*11,200	11,500	237,400	21	101,007,200	480,371,800	1,167	11	...	...	13	18	346	1,555	71	...	17	88
Total State	....	*300	*24,883	25,183	248,650	9.8	105,251,400	929,264,700	1,177	11	...	...	14	18	354	1,574	71	...	20	91

* Comparatively few flowing wells in Illinois, estimated to total not over 300.

Continued on page 134

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Leaky Tank Tops, or
Inside Corrosion

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REPRESENTATIVES

H. E. BOWMAN COMPANY, HOUSTON, TEXAS

REFINERY SUPPLY COMPANY OF CALIF., LOS ANGELES, CALIF.

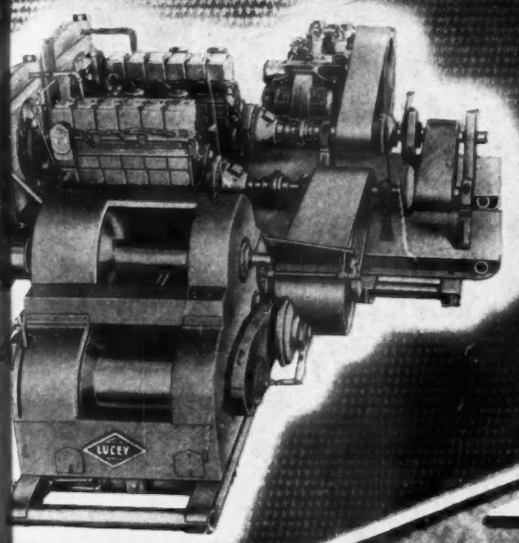
Illinois—Continued

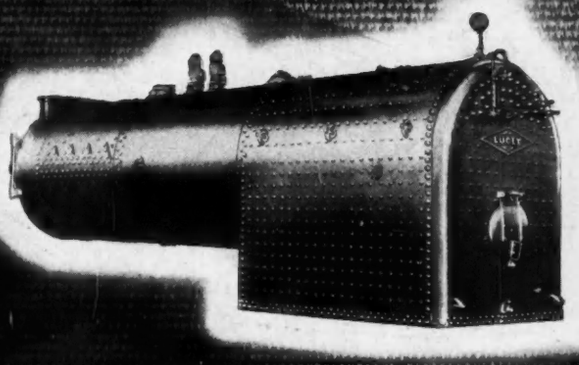
COUNTY AND FIELD	Year Found	*OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
					Daily at End of 1942															
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Eastern Illinois (Stripper Area)																				
Edgar:																				
Warrenton-Borton	1906	.....	.....	10	5	½	200	30,400	....	...	...	...	...	...	....	.....	...	...	...	....
Clark Co. Division	1904	.....	.....	3,200	1,057	....	380,000	53,497,000	....	...	...	...	...	...	....	.....	...	...	...	....
Clark-Coles: Westfield	1904	.....	.....	.....	.....	....	.....	.....	....	...	...	...	1	...	1	2	...	...	...	....
Clark:																				
Martinsville	1922	.....	.....	.....	.....	....	.....	.....	1	...	...	...	...	...	....	1	...	...	...	....
North Johnson	1907	.....	.....	.....	.....	....	.....	.....	....	...	...	...	...	...	1	1	...	...	...	....
Unclassified	....	.....	.....	.....	.....	....	.....	.....	....	...	...	...	...	...	....	.....	...	...	3	3
Crawford Co. Division	1906	.....	.....	6,250	3,805	....	1,342,500	148,648,500	....	...	...	...	...	...	....	.....	...	...	...	....
Crawford:																				
Main Field	1906	.....	.....	.....	.....	....	.....	.....	....	...	...	...	...	...	3	3	...	...	...	....
Allison-Weger	....	.....	.....	.....	.....	....	.....	.....	1	...	...	...	...	...	....	1	...	...	...	....
Lawrence Co. Division	1906	.....	.....	3,426	4,963	1½	1,750,000	229,212,500	....	...	...	...	...	...	....	.....	...	...	...	....
Lawrence:																				
Lawrence	1906	.....	.....	.....	.....	....	.....	.....	2	...	...	...	...	...	1	3	...	...	...	....
Wabash:																				
Allendale (Old)	1912	.....	.....	250	741	3	247,000	5,353,000	....	...	...	...	...	...	....	.....	...	...	...	....
Total Eastern Stripper	....	.....	.....	13,136	10,571	1	3,719,700	436,741,400	4	...	...	...	1	...	6	11	...	...	3	3
Northwestern Illinois (Stripper Area)																				
McDonough-Hancock:																				
Colmar-Plymouth	1914	.....	200	200	300	1½	100,000	2,887,000	....	...	...	...	...	...	....	.....	...	...	...	....
Illinois Basin (Old Pools)																				
Clinton:																				
Bartelso	1936	.....	.....	42	210	5	102,900	789,000	....	...	...	...	...	...	....	.....	...	...	...	....
Carlyle	1911	.....	.....	108	62	0.6	22,600	3,455,700	....	...	...	...	...	...	....	.....	...	...	...	....
Marion:																				
Sandoval	1909	.....	.....	74	30	0.4	11,000	2,719,400	....	...	...	...	...	...	....	.....	...	...	...	....
Wamac	1921	.....	.....	51	22	0.4	13,900	446,200	1	...	...	...	...	...	....	1	...	...	...	....
St. Clair:																				
Dupo	1928	.....	.....	72	55	0.8	274,100	1,854,200	5	...	...	...	...	...	2	7	...	...	...	....
Total Illinois Basin (Old Pools)	....	.....	.....	347	379	1	424,500	9,264,500	6	...	...	...	...	...	2	8	...	...	...	....
Illinois Basin (New Pools)																				
Bond:																				
Beaver Creek	1942	.....	.....	2	15	7	2,600	2,600	2	...	...	...	...	...	1	3	...	...	...	....
Woburn	1940	.....	.....	26	187	7	85,400	341,900	1	1	...	...	...	...	1	3	...	...	...	....
Unclassified	1942	.....	.....	.....	.....	....	.....	.....	....	...	...	...	...	...	....	.....	...	...	1	1
Clay:																				
Bible Grove	1942	.....	.....	26	1,950	75	281,000	281,000	29	...	...	...	...	...	9	38	...	...	...	....
Bible Grove, South	1942	.....	.....	1	37	37	6,900	6,900	1	...	...	...	...	...	1	2	...	...	...	....
Clay City, Consolidated	1937	.....	.....	.....	.....	....	.....	.....	7	...	...	...	...	...	4	11	...	...	...	....
Flora	1938	.....	.....	.....	.....	....	.....	.....	....	...	...	...	...	...	1	1	...	...	...	....
Iola	1939	.....	.....	5	15	3	12,000	23,000	3	...	...	...	...	...	....	3	...	...	...	....
Ingraham	1942	.....	.....	1	.....	....	400	400	....	...	...	...	...	...	....	.....	...	...	...	....
Kenner	1942	.....	.....	.....	.....	....	.....	.....	1	...	...	...	...	...	....	1	...	...	...	....
Sailor Springs	1941	.....	.....	33	860	26	327,000	503,500	12	...	...	...	...	...	6	18	...	...	...	....
Sailor Springs, South	1942	.....	.....	5	120	24	28,100	28,100	4	...	...	...	...	...	6	10	...	...	...	....
Toliver	1942	.....	.....	1	15	15	2,200	2,200	1	...	...	...	...	...	1	2	...	...	...	....
West Clay	1941	.....	.....	.....	.....	....	.....	.....	12	...	...	...	...	...	4	16	...	...	...	....
Xenia	1941	.....	.....	.....	.....	....	.....	.....	....	...	...	...	...	...	1	1	...	...	...	....
Unclassified	....	.....	.....	.....	.....	....	.....	.....	1	...	...	...	...	...	....	1	1	...	...	1
Clinton:																				
Boulder	1942	.....	.....	25	1,525	61	353,000	353,000	25	...	...	...	...	1	4	30	...	...	...	....
Frogtown	1918	.....	.....	.....	.....	....	.....	.....	....	...	...	...	...	...	1	1	...	...	...	....
Hoffman	1939	.....	.....	42	215	5	96,400	362,400	....	...	...	...	...	...	....	.....	...	...	...	....
Bartelso (Devonian)	....	.....	.....	23	295	13	113,500	488,800	....	...	...	...	...	...	....	.....	...	...	...	....
Posey	1941	.....	.....	2	6	3	1,500	3,400	....	...	...	...	...	...	1	1	...	...	...	....
Centralia	1937	.....	.....	665	5,225	8	2,241,100	22,593,700	....	...	...	...	...	...	....	.....	...	...	...	....
West Centralia	1940	.....	.....	.....	.....	....	.....	.....	3	...	...	...	...	...	3	6	...	...	...	....
Unclassified	....	.....	.....	.....	.....	....	.....	.....	1	...	...	...	...	...	....	1	1	...	1	2
Coles:																				
Cooks Mills	1941	.....	.....	.....	.....	....	.....	.....	1	...	...	...	...	...	1	2	...	...	...	....
Unclassified	....	.....	.....	.....	.....	....	.....	.....	....	...	...	...	...	...	....	.....	...	...	1	1
Crawford:																				
New Bellair	1942	.....	.....	1	8	8	5,100	5,100	2	...	...	...	...	...	3	5	...	...	...	....
Edwards:																				
Albion	1940	.....	.....	81	1,175	15	498,200	2,453,700	1	...	...	...	...	...	....	1	...	...	...	....
Albion, North	1942	.....	.....	1	6	6	2,900	2,900	1	...	...	...	...	...	....	1	...	...	...	....
Bone Gap	1941	.....	.....	.....	.....	....	.....	.....	14	...	...	...	...	...	1	15	...	...	...	....
Ellery	1941	.....	.....	2	14	7	9,800	22,700	....	...	...	...	...	...	....	.....	...	...	...	....
Ellery, North	1942	.....	.....	1	25	25	1,800	1,800	1	...	...	...	...	...	....	1	...	...	...	....
Parkersburg	1941	.....	.....	.....	.....	....	.....	.....	12	...	...	...	...	...	5	17	...	...	...	....
Samsville	1942	.....	.....	.....	.....	....	.....	.....	1	...	...	...	...	...	1	2	...	...	...	....
Effingham:																				
Mason	1940	.....	.....	.....	.....	....	.....	.....	4	...	...	...	...	...	4	8	...	...	...	....
Mason, South	1940	.....	.....	.....	.....	....	.....	.....	11	...	...	...	...	...	....	11	...	...	...	....
Louden	1937	.....	.....	.....	.....	....	.....	.....	1	...	...	...	...	...	3	4	...	...	...	....
Unclassified	....	.....	.....	.....	.....	....	.....	.....	....	...	...	...	...	...	....	.....	1	...	...	1
Fayette:																				
Louden	1937	.....	.....	1,932	42,600	22	18,179,600	87,185,900	36	...	...	...	6	2	6	50	...	...	...	....
St. James	1938	.....	.....	184	3,510	19	1,484,200	5,663,300	1	...	...	...	...	...	....	1	...	...	...	....
St. Paul	1941	.....	.....	14	305	22	79,200	83,100	12	...	...	...	...	...	1	13	...	...	...	....
Unclassified	....	.....	.....	.....	.....	....	.....	.....	....	...	...	...	...	...	....	.....	7	...	...	7
Franklin:																				
Akin	1942	.....	.....	2	112	56	35,400	35,400	4	...	...	...	...	1	2	7	...	...	...	....
Benton	1941	.....	.....	243	9,460	39	5,391,400	12,480,600	9	...	...	...	...	...	2	11	...	...	...	....
Benton, North	1941	.....	.....	.....	.....	....	.....	.....	5	...	...	...	...	1	2	8	...	...	...	....
Frankfort, West	....	.....	.....	.....	.....	....	.....	.....	1	...	...	...	...	...	....	1	...	...	...	....
Sesser	1942	.....	.....	4	55	14	18,300	18,300	2	...	...	...	...	...	5	7	...	...	...	....
Thompsonville	1940	.....	.....	20	80	4	34,300	265,800	....	...	...	...	...	...	....	.....	...	...	...	....
Valier	1942	.....	.....	.....	.....	....	.....	.....	1	...	...	...	...	...	....	1	...	...	...	....
Unclassified	....	.....	.....	.....	.....	....	.....	.....	....	...	...	...	...	...	....	.....	...	...	1	1

* Comparatively few flowing wells in Illinois, estimated to total not over 300.

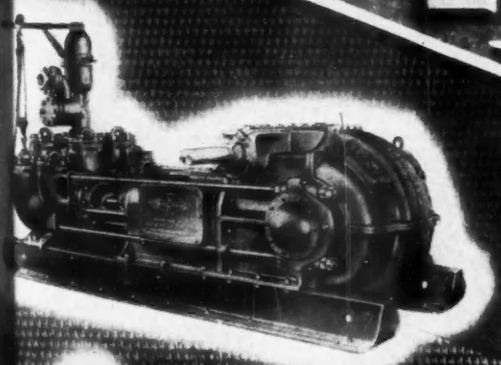
Continued on page 136

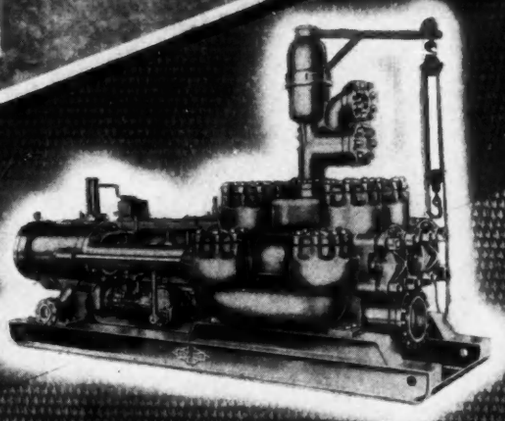
WHELAND-LUCEY DRILLING EQUIPMENT

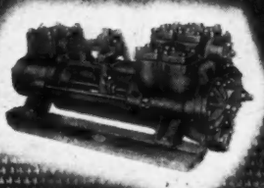


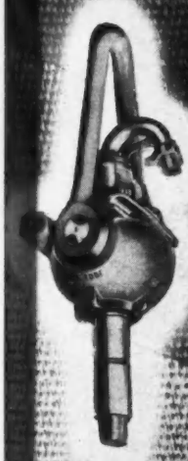


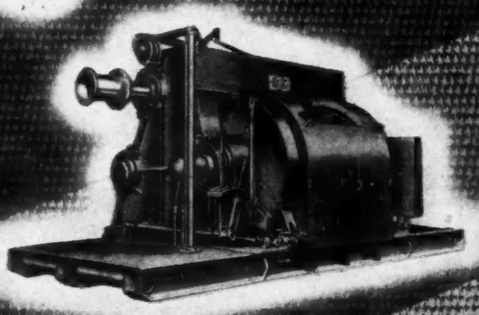
LUCEY











UCEY EXPORT ORPORATION

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Pull Rods
Pumps, Power
Pumps, Steam
Rock Bits
Rotaries
Sand Lines
Shale Separators
Slim Hole Outfits
Sprocket Chain
Sucker Rods
Swabs
Swivels
Tanks, Steel
Trailers
Traveling Blocks
Tubes, Boiler
Tubing
Turbo Generators
Tongs
Tool Joints
Wire Rope

Illinois—Continued

COUNTY AND FIELD	Year Found	*OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Gallatin:																				
Herald, West	1942			1	10	10	400	400												
Inman	1940			3	60	20	25,200	36,300	2						2	4				
Inman, East	1940			52	1,720	33	511,400	965,400	21						4	25				
Inman, North	1941			2	8	4	3,700	8,600	1							1				
Inman, West	1942			4	165	41	24,800	24,800	3						2	5				
Junction	1939			15	15	1	9,100	177,800												
Roland	1940								3						1	4				
Unclassified																	1		1	2
Hamilton:																				
Blairsville									4						4	8				
Bungay	1941			1	10	10	2,600	5,700	3						4	7				
Bungay, West	1942			8	850	106	73,000	73,000												
Dahlgren	1941			39	175	4	127,800	807,900							1	1				
Dale	1940			198	10,150	51	3,412,300	6,298,800	28					1	5	34				
Dale-Hoodville, Consolidated	1940								41				1		8	50				
Hoodville	1940			160	3,550	22	1,764,500	5,839,700	11					1	3	15				
Mill Shoals	1939								5						1	6				
Rural Hill	1941			163	7,350	45	3,577,100	5,288,500	78					1	13	92				
Rural Hill, South	1942			5	275	55	46,700	46,700												
Walpole	1941			30	1,675	56	709,900	914,500	16						6	22				
Unclassified																	4		3	7
Jackson:																				
Elkville	1941			1			700	1,100												
Jasper:																				
†Dundas Consolidated	1939																			
Dundas, East	1942			7	950	136	108,400	108,400	8						3	11				
Hidalgo	1940			1	5	5	1,500	9,300												
Boos	1940			46	535	12	308,100	1,278,800												
North Boos	1940			67	4,500	67	694,200	1,688,600	12						3	15				
Ste. Marie	1941								18						5	23				
West Liberty	1940			120	2,680	22	1,508,200	3,970,800												
Unclassified																				
Jefferson:																				
Coil, West	1942								1							1				
Cravat	1939														1	1				
Dix	1938			81	1,350	17	673,000	3,040,300	2							2				
King	1942			5	180	36	28,100	28,100	4						1	5				
Markham City	1942			10	1,060	106	160,200	160,200	10						3	13				
Rouches	1938			12	110	9	55,500	402,300							2	2				
Woodlawn	1940			136	4,880	36	3,024,900	5,616,800	11					4	7	22				
Unclassified																	1			1
Lawrence:																				
Allendale (New)	1941								13						1	14				
Ruark	1941														1	1				
Russellville Gas	1937								1	4						5				
St. Francisville, East	1941								6							6				
South Lawrence	1941								20						8	28				
Unclassified									1							1	1			1
Macoupin:																				
Carlinville, N.	1941														3	3				
Plainview	1942								1						4	5				
Unclassified										4						4				
Madison																				
St. Jacob	1942			13	625	48	152,900	152,900	24					2	2	28				
St. Jacob, South	1942			12	1,260	105	111,700	111,700												
Unclassified																	2		2	4
Marion:																				
Alma	1941			2	40	20	19,000	27,000	1						2	3				
Brown									3						4	7				
Centralia	1938								1							1				
Dix									3							3				
Junction City									1						1	2				
Kell	1942														1	1				
Patoka	1937			104	790	8	340,500	2,850,200												
Patoka, East	1941			54	1,540	29	680,400	1,343,400												
Salem	1938			2,387	32,250	14	14,731,300	167,248,900	2							2				
Sandoval (Devonian)	1938			30	520	17	261,300	2,218,600												
Tonti	1939			65	1,825	28	856,700	5,547,500												
Unclassified																	30		1	31
Montgomery:																				
Unclassified	1942									1						1				
Perry:																				
Tamaros	1942			2	10	5	2,200	2,200	3						1	4				
Richland:																				
Amity	1942			1	12	12	1,100	1,100	1							1				
Bonpas	1941			2	55	28	25,600	44,900												
Bonpas, West	1941			3	62	20	34,300	80,900	3						2	5				
Dundas Consolidated	1939			117	775	7	532,900	4,186,800	41						6	47				
‡Dundas, East	1942																			
Noble	1937			157	5,770	37	2,060,000	11,804,700	26	1				1	13	41				
Noble, North	1937			90	1,125	13	452,600	2,422,900												
Noble, South	1937			10	125	13	51,100	450,600												
Olney	1937			32	350	11	122,600	1,204,600	2						2	4				
Parkersburg	1941			41	2,150	52	1,438,100	2,158,500	1					1	3	5				
Schnell, North	1942			1			700	700												
Shelby:																				
Lakewood	1941			1	7	7	8,000	16,000							1	1				
Wabash:																				
Allendale (New)	1941			50	1,050	21	194,900	333,000	12						7	19				
Friendsville	1942			4	240	60	10,900	10,900	4						4	8				
Keensburg Consolidated	1939								30						5	35				
Griffin	1939			325	4,250	13	1,742,900	7,933,700												
Lancaster	1940			18	175	10	46,000	486,600	2						3	5				
Linn	1940			20	180	9	59,500	165,200							1	1				
Maud	1940			15	95	6	49,600	310,000												
Mt. Carmel	1940								10						4	14				
Unclassified																	2		1	3

* Comparatively few flowing wells in Illinois, estimated to total not over 300.

Continued on page 138

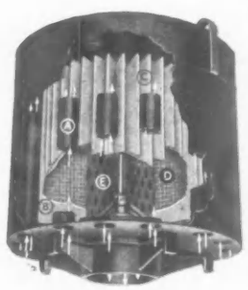
STAYNEW FILTERS

What Does the Name "STAYNEW" Mean? » » » » » » »

1. Less Wear on Engines and Compressors
2. More Service from Air-Powered Tools
3. Longer Lasting Filters

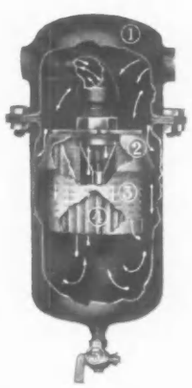
ENGINE AND EQUIPMENT SAVING FILTERS FOR THE OIL INDUSTRY

FOR ENGINE & COMPRESSOR PROTECTION



Models D, DS: Permit only clean, dust-free air to be drawn into engine and compressor intake. Feltex Filtering Medium (B) in Radial Fin Construction (C) provides greatest possible filtering area and efficiency with *continued low* restriction to air flow. (A) Silencing Chamber (Model DS only); (D) Galvanized Mesh Frame; (E) Reinforcing tube. D and DS Protectomotors make new engines and compressors *stay new*—add to life and efficiency of old ones.

FOR COMPRESSED AIR & GAS LINES



Models CP, CPH: Thousands in use throughout the oil industry. Guaranteed delivery of clean, dry air, free from dust, dirt, pipe-scale, rust, water—air-powered tools operate more efficiently, last longer. Like all Staynew and Protectomotor filters—easy to inspect, easy to clean, low restriction to air flow, long lasting. Models for horizontal and vertical installation. (1) Container; (2) Baffle; (3) Insert Housing; (4) Filter Insert in Radial Fin Construction; (5) Drain Cock.

Representatives in Principal Cities

FOR LIQUID LINES (Incl. Water)

Models CPHL, CPHLS: Famous Radial Fin Construction applied to the filtration of liquids. Fuel and lubricating oil models remove abrasive matter from oil lines for engines and compressors, preventing excessive wear of all parts lubricated by crankcase oil system; prevent, also, clogging and wear of fuel nozzles. All parts *stay new* longer. Swing-bolted head if required. Very large capacity models available.

NEW WATER FILTER: An outstanding success everywhere. Used in scores of applications where pure filtered water is a necessity.

Get the Entire Story!

Find out about Staynew and Protectomotor engine and equipment-saving features: Radial Fin Construction—Feltex and Glastex Filtering Mediums—**Double** Counter-clockwise Rotating Curtains—Fire-resistant Wire Kladding, etc.

Catalog describes entire line, including filters for building ventilation.

WRITE FOR COMPLETE CATALOG

PROTECTOMOTOR 99 and Per Cent Efficient AIR FILTERS

STAYNEW FILTER CORP.

43 Centre Park, Rochester, N. Y. *"Filter Headquarters"*

Illinois—Continued

COUNTY AND FIELD	Year Found	*OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Washington:																				
Cordes	1939			124	995	8	433,300	2,154,200	3							3				
Dubois	1939								1							1				
Dubois West	1942			1	10	10	1,100	1,100	1							1				
Irvington	1940			79	1,895	23	746,000	2,262,700	11						1	12				
Wayne:																				
Aden	1938								1							1				
Barnhill	1939			58	275	5	121,900	1,582,700							1	1				
Barnhill, East	1941			5	51	10	28,100	34,000												
Boyleston	1938			105	1,325	13	682,600	3,088,800	16						3	19				
Cisne, North	1942			1	15	15	2,200	2,200	1							1				
Cisne	1937			47	505	11	182,100	2,649,100	1						1	2				
Clay City, Consolidated	1937			464	3,760	8	2,177,600	20,343,900	12							12				
Coil	1942			15	850	57	252,900	252,900	15						8	23				
Coil, West	1942			1	12	12	1,100	1,100												
Covington	1942			31	6,750	218	1,084,400	1,084,400	28						3	31				
Enterprise	1939			172	1,350	8	648,200	6,478,000												
Enterprise, South	1942			2	45	23	9,100	9,100												
Enterprise, West	1940			64	1,550	24	765,800	1,640,100												
Fairfield	1942			1	12	12	1,100	1,100												
Geff	1941			14	810	58	110,200	114,100	14						6	20				
Geff, West	1942			3	98	32	9,500	9,500	3						3	6				
Golden Gate	1942			1	45	45	17,200	17,200	2						1	3				
Johnsonville	1941			245	7,850	32	5,120,400	10,781,400	30					1	7	38				
Johnsonville, South	1942			2	15	8	2,200	2,200	2							2				
Johnsonville, West	1942								1							1				
Mt. Erie	1938								10						5	15				
Mt. Erie, Southwest	1942			1	10	10	700	700												
Mayberry	1941			5	305	61	100,700	107,100	5						4	9				
North Aden	1938			64	740	12	269,000	2,727,900	1						2	3				
Sims	1941								53						10	63				
Sims, North	1942								7						1	8				
Unclassified									2							2	4			4
White:																				
Burnt Prairie	1940			16	127	8	73,000	327,400												
Carmi, North	1942			2	55	28	20,800	20,800	3							3				
Carmi	1940								1						2	3				
Centerville	1940			5	105	21	42,000	160,000												
Centerville, East	1941								25						7	32				
Concord	1942			1	16	16	8,400	8,400	1						2	3				
Epworth	1941			9	205	23	86,500	100,200	6						4	10				
Grayville	1939			3	45	15	19,300	149,300	3						1	4				
Grayville, West	1941														2	2				
Herald	1940			6	70	12	26,000	48,700	4						1	5				
Iron	1940			30	525	18	250,400	1,716,400	1						1	2				
Maunie	1941			2	12	6	8,400	12,700	4						2	6				
Maunie, North	1941								2							2				
Maunie, South	1941								13						7	20				
Mill Shoals	1939			111	1,370	12	895,000	2,557,900	13						5	18				
New Harmony Consolidated	1939			181	6,340	35	2,737,200	6,631,700	58					6	7	71				
New Harmony, North	1940			150	4,480	30	1,917,300	4,610,500												
New Haven	1941			20	278	14	127,800	299,400	3						1	4				
Phillipstown	1939								25						1	26				
Roland	1940			130	4,270	33	1,906,800	3,002,700	48					1	1	50				
Stokes	1939			25	1,150	46	397,100	653,200	10							10				
Storms	1939			144	1,540	11	731,100	3,678,700	1						3	4				
Unclassified																	15		5	20
Total Above Fields				10,405	215,130	21	92,144,000	460,439,300	1,167	11	...	...	13	18	346	1,555	71	...	17	88
Unclassified, Basin New Fields				1,095	22,270	20	8,863,200	19,932,500												
Total Illinois Basin New Pools		300*	11,200*	11,500	237,400	21	101,007,200	480,371,800	1,167	11	...	...	13	18	346	1,555	71	...	17	88

* Comparatively few flowing wells in Illinois estimated to total not over 300.
† Included with Richland County. ‡ Included with Jasper County

Indiana

(Compiled with cooperation of Indiana Department of Conservation, Division of Geology)

Adams:																				
Trenton															1					
Crawford															1	1				
Daviess:																				
Cannelburg	1925		26	26					3						6	9				
Glendale-Hudsonville	1929									3					2	7	1	1		2
Logootee	1900														1	1				
Veale	1926		31	31					2						1	3				
Unclassified																		1	3	4
Decatur:																				
Forest Hill										1						1				
Greensburg	1893									4						4				
Gibson:																				
Fleener (Abnd.)																				
Francisco	1929						12,000	4,500												
Griffin	1938		395	395	8,258	21	3,555,200	27,900												
Hazleton	1941		17	17			164,900	13,075,700	9						3	12				
Johnson							3,100	179,600	14						14	28	1			1
Kirksville	1942		10	10			42,500	4,300	1						1	2				
Mt. Carmel							3,800	42,500	10	2					5	17				
Oakland City (Columbia)	1907		36	36			900	5,200												
Oatsville-Wheeling	1919							3,000	1						1	2				
Owensville							4,900	4,900							2	2				
Patoka	1941						3,000	4,500												
Somerville	1942		16	16			3,000	3,000	2						1	1				
Unclassified															2	4				
Hamilton																	4	1	1	6
															2	2			1	1

Continued on page 140

Hitler and Hirohito Will Hear From This

It's what is known as a 50,000 Kva transformer. It's one of several we installed recently to replace others of lesser capacity to handle electric power needed by war industries in the territory served by our power plants and electrical transmission system.

In war production, you know, there is no substitute for dependable electric service. There's nothing "just as good."

In the battle for production it's helping tremendously to turn out petroleum products, ships, chemicals and other war products faster and better.

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Buy War Bonds and Stamps Regularly

Indiana—Continued

COUNTY AND FIELD	Year Found	[2]OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	[3]Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Harrison:																				
Laconia (Gas)	1910									2					3	5				
Henry			2	2											1	1				
Jay									2	1					2	5				
Knox:																				
Oaktown	1930									1						1				
St. Francisville (Ext. fr. Ill.)	1942		1	1			400	400	1							1				
St. Thomas	1940		6	6			10,000	65,400	1							1				
Pike:																1				
East Iva										2					1	3				
Oatsville	1919																1			1
Spurgeon	1942		1	1			15,200	15,200	1						3	4				
Union-Bowman	1916																			
Unclassified									2						2	4	1	1	1	3
Posey:																				
Bufkin-Caborn	1940		53	53			251,400	353,900	10						7	17				
Caborn, West	1940						12,000	25,000												
College	1940						25,300	74,600							1	1				
Grafton (Abnd.)	1942						600	600	1							1				
Griffin	1938		‡	‡	‡	‡	‡	‡	8						1	9				
Half Moon	1942		1	1			3,900	3,900	1						1	2				
Heusler	1938		43	43			256,300	902,100	2						2	4				
Hovey Lake	1942		1	1			240	200	1						1	2				
Lamott	1942		2	2			18,900	22,700	2						2	4				
Mount Vernon	1941		19	19			683,800	744,900	12						7	19				
Mumford Hills	1942		1	1					1							1				
New Harmony	1939						523,400	1,675,400												
New Haven (Ext. fr. Ill.)	1942		1	1			8,000	8,000	1							1				
Point	1942		1	1			20,500	20,500	1						2	3				
Prairie	1942		1	1			7,800	7,800	1						2	3				
Rapture								600												
Ridge	1942		1	1					1						1	2				
Rufkin	1942						31,500	98,830												
Stooker	1942		2	2			14,400	14,400	2						3	5				
Welborn							5,900	9,900												
Unclassified									5	1						6	2		3	5
Randolph									1	2					1	4				
Rush										3						3				
Spencer:																				
Enterprise	1942		1	1			1,000	1,000	1						2	3				
Eureka	1942		1	1			2,300	2,300	1						1	2				
Hatfield	1941		11	11				17,200	3						6	9				
Rock Hill-Grandview	1928		21	21			4,000	4,000	5						5	10				
Rockport	1939		16	16					1						1	2				
Troy	1928								1						2	3				
Unclassified																	1			1
Sullivan:																				
Dodds Bridge (New Pay)	1942						69,500	69,500	6						3	9				
Shelburn-Graysville	1911		343	343						1						1				
Unclassified																	1			1
Vanderburgh:																				
Huesler	1938								1						2	2				
Vanderburgh	1931						1,000	1,200							1	1				
Vaughan	1941								9						1	10				
Vernon Heights															1	1				
Vienna																				
Vigo:								398,700												
Prairie Creek	1937																			
Sissi	1926		50	50			26,200	104,400	1							1				
Warrick:																				
Millersburg								2,700	1						2	3				
Wayne										1						1			1	1
Total, above fields			1,110	1,110	8,258*	21*	5,786,840	18,000,400	129	24					113	266	13	4	10	27
Indiana, Unclassified			821	821	7,202†	5†	957,160	126,487,600												
Total Indiana			1,931	1,931	15,460	8	6,744,000	144,488,000	129	24					113	266	13	4	10	27

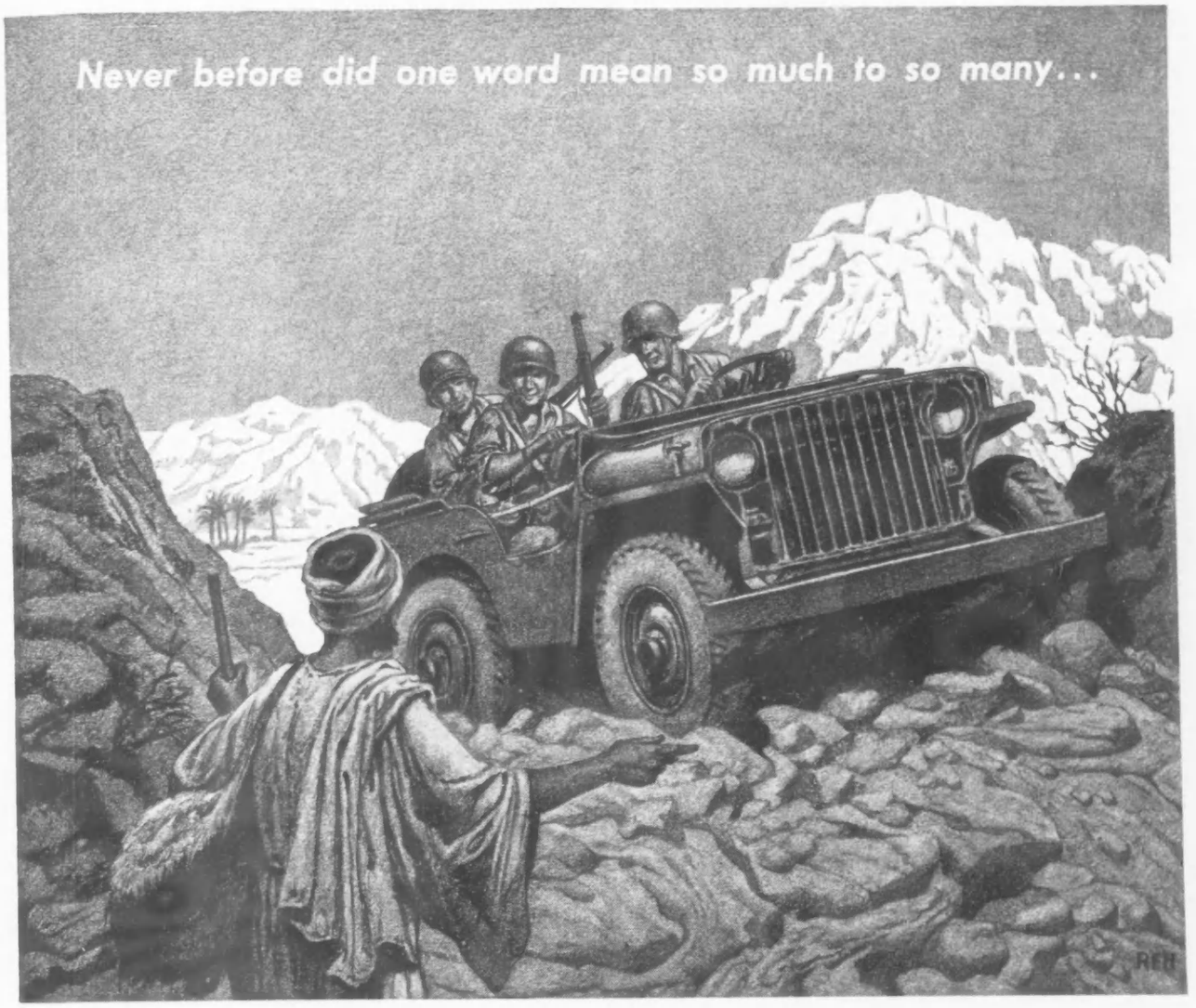
* Griffin only. † All Indiana outside Griffin. ‡ Data on producing wells and production shown under Gibson County.

Kansas

Barber:																				
Bear Creek	1942								1							1				
Deerhead	1942									1						1				
Lake City, Arbuckle	1937	*	1	38	38	14,405	80,095	1								1				
Lake City, Simpson	1937	*	1	29	29	9,764											1			1
Lake City, South	1942							1								1				
Medicine Lodge	1937						45,703		2							2				
Sun City	1941		2	152	76	37,543	37,543	1							3	4				
Whelan	1934		18	704	39	208,954	711,411		1						2	3				
Unclassified								1								1				
Barton:																				
Ainsworth, Arbuckle	1936		62	1,629	26	516,537														
Ainsworth, Lans.-K.C.	1942		1	29	29	5,834	2,635,910	5								7				
Ainsworth, Shawnee			1	16	16	5,376														
Ainsworth, N. W., Arbuckle	1941		4	104	26	36,972	72,467	2							2	4				
Ainsworth, N. W., Lans.			2	58	29	20,870														
Ainsworth, W., Arbuckle	1941		1	29	29	8,974	12,814								1	1				
Albert	1935		16	407	25	140,093	800,626													
Beaver	1934		26	678	26	202,738	1,186,331	3							1	4				
Beaver, North	1937	*	3	84	28	27,621	236,579													
Beaver, Shallow (N.W.)	1942	*	7	350	50	102,520	102,520	1								1				
Bird	1940						6,115													
Bloomer, Arbuckle			189	6,855	36	2,199,041														
Bloomer, Conglomerate	1936		11	14	1	5,431	11,317,917	4							3	7				
Bloomer, Lans			32	833	26	280,619														
[8]Boyd								1								1				

[2] Only 336 flowing wells in Kansas estimated out of 22,360; data by fields not available.

Continued on page 142



You can serve by CONSERVING

Name a continent . . . and you've named an American battlefront. From Tunisia to Timor, from India to Iceland, Americans and their Allies face a need for more arms and equipment . . . more tanks and trucks, more planes and ships and guns.

And those modern weapons need alloy steels in vital parts. Nickel steels, for example, that provide extra toughness, strength and added resistance to shock and impact. No need to tell you how essential these qualities are to the equipment of our armed forces.

That's why it's so important to *conserve* critical alloys. Every possible pound must be saved for our fighting men.

The best way to help is by making sure all metal scrap in your plant is properly segregated. Collect ferrous and non-ferrous scrap, in separate containers, at the machines where generated.

High-speed tool steels and alloyed constructional steels should also be collected and salvaged separately. When in doubt . . . segregate!

If metal problems are bothering you—if you would like suggestions for extending your own metal conservation program—call on our technical staff for "CONSERVICE,"—a new name for counsel and data that will help you conserve.

* * **Nickel** * *

THE INTERNATIONAL NICKEL COMPANY, INC. 67 WALL STREET NEW YORK, N. Y.

Kansas—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
					Daily at End of 1942															
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Barton—Continued:																				
Davidson, Arbuckle	1928			4	95	24	29,675													
Davidson, Gorham				2	36	18	12,218	131,974	1						1	2	1			1
Davidson, Lans	1942			2	59	29	23,581													
Eberhardt, Arbuckle	1935			4	90	22	59,980	288,280												
Eberhardt, Lans.-K.C.	1942			2	51	25	10,528	10,528	1							1				
Ellinwood, North	1937			1	18	18	6,008	50,808												
Feist	1936			1	6	6	41,909	52,765												
Feltes	1939			13	741	57	211,654	463,129	1						1	2				
Hagan	1938			4	121	30	39,087	70,147												
Hiss	1936			5	146	29	51,224	340,324												
Hoisington, Arbuckle	1938			2	53	26	18,019	112,275												
Hoisington, Lans.				1	34	34	11,146													
Kowalsky	1942			1	10	10	42,089	2,089	1											
Kraft-Prusa, Arb.-Gor	1937	*		212	9,976	47	2,622,130		63						13	76				
Kraft-Prusa, Lans		*		18	852	47	219,901													
Kraft-Prusa, Shawnee		*		7	241	34	66,123													
Kraft-Prusa, S. Lans		*		1	35	35	4,730	5,762,154												
Kraft-Prusa, N. E. Arb		*		3	80	27	27,034		2						3	5				
Kraft-Prusa, W., Arbuckle		*		6	281	47	80,854		2							2				
Kraft-Prusa, S. E., Arb		*		1	37	37	1,607		2						1	3				
Krier	1939							252,400	2							2				
Krukenberg	1939						1		2							2				
Lanterman, Arbuckle	1935			4	142	35	41,266	426,190								1		1		1
Lanterman, Lans				7	157	22	69,524													
Marchand, West	1942			8	274	34	95,669	95,669												
Merton, Regan	1942			2	51	25	7,772	7,772	1							1				
Mue-Tam, Arbuckle	1942			1	27	27	4,969	4,969	1							1				
Odin	1938			1	15	15	4,484	18,924												
Otis																				
Pawnee Rock, East	1941			1	28	28	8,556	10,176							1	1				
Rick, Arbuckle	1936			2	37	18	15,098	350,378		1						1				
Rick, Lans.-K.C.				7	220	31	78,810													
Silica	1931								9											
Stickney	1941			7	196	28	[3]19,014	[3]19,014	14						2	11				
Straub	1934			1	12	12	[4]2,407	6,646							4	18				
Susank				5	89	17	33,671	33,671												
Unclassified									5	31						6				
Brown:																				
Unclassified									1							1				
Butler:																				
Augusta, North	1914			66			123,800	16,209,300	1							1				
Augusta, South	1916			142			291,100	42,960,900							1	1	1			1
Brandt	1936							636,280												
Burgess									2						2	4				
Douglas	1916								1							1				
Dunn's Mill	1942								1							1				
Eckels	1940							18,680												
El Dorado	1917			1,563			2,547,300	182,446,500	20							20	1			1
Ferrell	1939							83,250	1						1	2				
Fox-Brush	1917														1	1				
Hanna, South															1	1				
Haverhill	1927							3,328,250	1							1				
Keighley	1925			3	84	28	28,128	91,728	2						1	3				
McCullough	1926							393,889												
Potwin	1921								3						1	4				
Seward								959,560												
Unclassified									2						1	3				
Clark:																				
Morrison	1936							124,700												
Cowley:																				
Baird, East	1940							4,950												
Brown	1922							202,900												
Bruce	1941							690												
Burden	1926														1	1				
Carson	1924							3,112,558												
Clover	1940							4,350												
Couch	1937			20	649	35	194,532	392,032	3						2	5			1	1
Darien	1939			5	170	34	56,003	170,489												
David	1935							563,676												
David, South	1934							91,850												
Deichman	1942	*		4	125	31	26,731	26,731	4						2	6				
Dunbar	1938							6,820							1	1				
Eastman	1924							2,379,124							1	1				
Falls City	1916							1,183,076												
Frog Hollow	1937			45	1,302	29	377,454	1,074,510	9						1	10				
Frog Hollow, East	1941			4	108	27	26,662	32,202	3						1	4				
Gibson	1941			7	179	25	49,210	64,540	3						1	4				
Gueda Springs	1936							219,950	2						3	5				
Graham	1924							2,491,340												
Hanna	1936							5,190												
Henderson, Arbuckle	1942			1	34	34	2,587	2,587	2							2				
Henderson, Lans	1942			1	15	15	3,273	3,273												
Hittle	1926			69	2,237	32	801,745	4,001,045												
Hower	1935							17,474												
Mahannah	1918							36,920												
Morel									1											
Rahn	1941			2	32	16	18,187	34,417	1						1	2				
Rainbow Bend	1923							13,328,546							1	1				
Rock	1923			36	472	13	[2]59,145	1,575,945												
Rock, West	1937							410,679												
Rock, North	1937							65,023												
Turner	1937							166,998												
Udall								50,460												
Weathered, Arbuckle	1935			22	421	19	137,556													
Weathered, Lans				2	38	19	11,702	2,209,658	1							1				
Weathered, Stalnaker				1	15	15	3,000													
Winfield (Gas)	1914						[1]	96,900							1	1	1			1
Unclassified									2						5	7			1	1

† See this footnote at end of state.

Continued on page 144

Banks HAVE HELPED AMERICA IN EVERY WAR . . . . .

From 1776 to 1943—from the American Revolution to World War No. II—America's banks have played a prominent part in every war fought by the United States. And today, America's banking industry is measuring up to its biggest opportunity—its greatest responsibility—that of banker, backer and fiscal agent for Uncle Sam.

This bank, too, is doing everything possible to help win the present conflict; making government loans, buying War Bonds, financing oil industry operations and the production of war equipment.

NATIONAL BANK OF TULSA

The Oil Bank of America

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

Kansas—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Davidson:																				
Prusa									1							1				
West Silica									1							1				
Unclassified									2							2				
Edwards:																				
Belpre	1942									1						1				
Elk:																				
Sellars	1937							15,721												
Youngmeyer	1941							4,564	2						1	3				
Ellis:																				
Bemis, Burnett	1935			397	15,566	39	4,805,656	20,961,788	25						3	28				
Bemis, Shutts	1935			25	718	28	211,432													
Bemis, South	1938			1	30	30	9,807	35,617												
Blue Hill, Arbuckle				2	41	20	13,936													
Blue Hill, Lans	1937			14	437	31	135,007	550,269												
Blue Hill, Shaw				3	80	26	26,876													
Burnett, Arbuckle	1937			207	14,697	71	4,241,646	9,705,490												
Burnett, Lans	1941			2	50	25	17,844													
Catherine	1936							123,700												
Emmeram	1937			4	124	31	41,202	105,714												
Hadley	1929							58,562												
Haller	1936			1	10	10	2,054	15,914									1			1
Herzog	1940			3	149	49	46,971	95,111												
High Spot	1941							2,694							1	1				
Koblitz	1937			8	250	31	84,787	217,494												
Kraus	1936							58,900												
Kraus, Northwest	1942			1					1							1				
Marshall	1936			24	870	36	268,487	922,237	3							3				
Penny Wahn	1936			1	32	32	8,132	42,232												
Richards	1938			2	40	20	13,834	94,984												
Ruder	1935							692,950												
Solomon	1936			2	26	13	25,602	104,402												
Sugar Loaf, A	1941			2	35	17	15,081	25,406								2				
Sugar Loaf, S. E.	1941			1	27	27	8,931	11,866												
Toulon	1935			3	78	26	24,122	198,022												
Utert	1936			5	89	17	25,352	180,402												
Walters	1936			1	1,754	1,754	532,320	1,930,870							2	2				
Unclassified															4	4				
Ellsworth:																				
Breford, Arbuckle	1932			20	720	36	228,717													
Breford, Lans				8	182	22	54,270	1,547,138												
Breford, S. W., Arb.				1	15	15	4,201													
Edwards									2							2				
Heiken, N., Arbuckle	1942			2	48	24	13,497	13,497	1							1				
Lorraine, Arbuckle	1934			54	1,632	30	435,268	8,786,392												
Lorraine, Lans.-K.C.				30	450	15	62,174													
Stoltenberg	1931			159	5,999	38	1,845,271	8,507,869	5						1	6				
Stoltenberg, W				6	164	27	55,376		2							2				
Stoltenberg, S. W.	1940			2	52	26	15,174	30,644							1	1				
Virgil									2							2				
Wilkens	1934	*		63	2,498	39	802,057	2,269,364	5						2	8				
Wilkens, S. E., Arbuckle	1942	*		3	157	52	21,050	21,050	1						1	2				
Unclassified									2						1	3				
Finney:																				
Hugoton	1942									1						1				
Nunn	1938			2	101	50	33,158	148,113								1				
Unclassified										1						1				
Graham:																				
Gettysburgh	1941			1	30	30	8,284	9,301							1	1				
Morrel	1938			13	1,512	116	328,893	555,193	7						2	9				
Penokee, Lans.-K.C.	1940			1	55	55	18,119	30,369							1	1				
Grant:																				
Hugoton										1						1				
Greenwood:																				
Beaumont									7						7	14	2			2
Climax										1						1				
Hilltop									1							1				
Keller	1941							12,500												
Lamont	1927								1							1				
Quincy	1926								2							2				
Reece									1							1				
Severy									1						2	3				
Toronto									1						1	2				
Virgil	1916								4						5	9				
Unclassified									1						2	3				
Harvey:																				
Halstead	1929			15	269	18	43,926	1,335,776												
Hesston	1941			1	25	25	8,935	8,935												
Hollow-Nikkel	1931							18,784,807												
Sperling	1935			7	22	3	51,661	392,315												
Stucky	1942	*		1					1							1				
Haskell:																				
Hugoton										4						4				
Jefferson:																				
Ackerland	1942									1						1				
Forest City															1	1				
McLouth									7	38					26	71			1	1
Oskaloosa									1							1				
Kearny:																				
Larkin										2						2				
Patterson	1941			3	117	39	32,011	40,138	1						2	3				
Kingman:																				
Cunningham, Lans	1931	*		77	2,213	28	686,846	3,474,807	13	2				1	3	19	1			1
Cunningham, Viola				7	282	40	69,258													
Leavenworth:																				
Linwood															2	2				
McLouth									2	8					12	22				
Unclassified										1						1				
McPherson:																				
Bitikofer	1940			2	28	14	13,153	21,513												
Bornholdt	1937	*		149	5,754	38	1,789,399	4,397,899						1		1				

† See this footnote at end of state.

Continued on next page

Kansas—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
McPherson—Continued:																				
Canton, North	1936			2	46	23	14,715	83,183												
Chindberg	1929							1,308,310							1	1				
Crowther, Chat	1942			3	144	48	6,302	6,302	1							1				
Graber, Hunton	1934			122	2,567	21	954,757	6,965,432	1							1				
Graber, Misener	1941			2	30	15	5,647													
Henne	1940			13	559	43	140,131	167,451	6						1	7				
Henne, S. E.									1							1				
Johnson	1932			14	286	20	94,277	2,722,142												
Lindsborg, Simpson		*		7	545	78	77,803	143,435	35						3	38			1	1
Lindsborg, S. W.	1942	*		33	994	30	134,596	134,596	1							1				
McPherson	1926							924,735	1							1				
Ritz-Canton	1929							34,905,573	1						1	2			1	1
Roxbury	1938			37	1,298	35	418,037	929,289												
Roxbury, South	1942			1	76	76	5,772	5,772	3						3	6				
Smyres															1	1				
Voshell	1929			88	1,696	19	552,293	24,084,561	1							1				
Unclassified									3						2	5				
Marion:																				
Hillsboro	1927							1,821,484												
Lost Springs	1926			117	3,035	26	871,646	1,711,646	15						7	22			2	2
Lost Springs, East	1942			1	6	6	[2]2,489	2,489	1						1	2				
Ness:																				
Aldrich	1929			12	467	38	159,053	514,709							1	1				
Norton:																				
Hewitt	1941			2	48	24	10,096	13,803							1	1				
Ray									1						1	2				
Pawnee:																				
Pawnee Rock	1936			25	1,059	42	326,430	646,148	1						1	2				
Pawnee Rock, East	1941			1	28	28	8,556													
Zook, Arbuckle	1942	*		2	39	19	6,209	6,209	1							1				
Unclassified									2							2				
Phillips:																				
Bow Creek	1939			1	13	13	[2]2,816	20,291												
Dayton	1941			23	760	33	131,829	138,915	18						3	21				
Friebus									1							1				
Ray	1940	*		61	2,842	46	761,653	956,853	33						1	34				
Pratt:																				
Cairo, Viola	1939			2	99	49	25,004	65,122		1						1				
Carmi	1942								1							1				
Iuka, Arbuckle	1941	*		1	5	5	[1]1,330													
Iuka, Simpson	1937			15	540	36	98,695	235,798	8						4	12	1			1
Iuka, East, Simpson		*		1	40	40	1,205													
Unclassified									1							1				
Reno:																				
Abbyville	1927						47,132	455,760	2							2				
Buhler	1938			9	192	21	36,294	401,253							1	1				
Burrton, Chat	1931			335	4,858	14	432,729	34,006,365	1							1				
Burrton, Hunton	1931			58	1,430	24	480,529													
Friendship, Viola	1941			1	6	6	650	1,890												
Hendrickson, Viola	1941			7	264	37	[2]9,877	[2]9,877	21						3	24				
Hilger	1934			32	988	30	334,739	2,372,298												
Lerado, Lans.-K.C.	1935			1	13	13	[2]2,102	2,401,524												
Lerado, Viola	1935			31	446	14	[2]50,952													
Morton, Lans.-K.C.	1942			1	15	15	4,580	4,580	1						1	2				
Peace Creek, Viola	1941	*		121	9,563	79	1,705,873	1,779,089	39						6	45				
Peace Creek, N. E., Viola	1941	*		13	313	24	[2]28,574	29,921	32					1	1	34				
Peace Creek, S. W.	1942								1	1					2	4				
Schweizer, Viola	1941			2	33	17	[2]3,060	3,060	12						2	14				
Schweizer	1942								1							1				
Yoder	1935						[4]	72,470												
Zenith									4						2	6				
Unclassified									6							6				
Rice:																				
Bornholdt, W.	1941			1	7	7	[1]1,387	1,810	1						1	2				
Bowman, Arbuckle	1936			2	53	26	13,976	80,802												
Bowman, Lans.	1941			4	113	28	45,035													
Brandenstein	1933			2	45	22	15,602	389,853												
Bredfeldt, W.	1939	*		2	30	15	9,776	34,101												
Campbell, Arbuckle	1938			24	528	22	[2]41,447	982,082	3						1	4				
Campbell, Lans.-K.C.	1938			3	67	22	[2]8,485													
Chase, Arbuckle	1931			354	10,575	29	3,018,057	25,585,129	11	1					7	19				
Chase, Lans.	1941			21	776	37	154,331													
Cramm, Lans, K. C.	1941			11	249	22	[2]27,943	[2]27,943	6							6				
Doran	1936			5	146	29	36,842	171,356	1							1				
Eberhart									3	1						4				
Edwards	1936			89	3,243	36	1,024,937	3,985,535							1	1				
Geneseo, Arbuckle	1934			193	8,914	46	2,748,899	9,786,164	7							7				
Geneseo, Simpson	1941			1	25	25	9,065													
Guldner	1935							247,689												
Haferman, Arbuckle	1936			8	222	27	76,039	577,526	2					1		3				
Haferman, Lans. K. C.	1936						599													
Heinz	1938			1	15	15	8,131	47,683												
Karber	1940			3	61	20	20,769	48,199												
Keesling	1935			76	1,798	22	[2]196,165	3,229,326	15						7	22				
Lyons	1939						[1]	10,237												
Midway	1939							151,089												
Orth, Arbuckle	1932			10	289	28	72,395													
Orth, Lans., K. C.				1	14	14	5,465	897,540	2						1	3				
Orth, Shawnee				1	40	40	12,783													
Orth, E., Arbuckle				3	114	38	35,935													
Pioneer	1942	*		1	28	28	3,380	3,380	1							1				
Ploog	1930			9	185	20	71,989	1,313,359												
Ponce	1936							29,337												
Raymond, Arbuckle	1929			42	1,333	31	417,428	7,036,877	9						2	11	1			1
Raymond, Lans.	1929			25	1,338	53	363,546													
Richard	1935						18,449	84,209												
Silica, Arbuckle	1931			639	20,382	31	6,497,650													
Silica, Lans.				12	356	29	92,746	45,051,013	9						6	15	1		1	2
Silica, South, Arb.				123	5,625	44	1,712,717													
Smyers	1942	*		22	744	33	133,615	133,615	19					4	2	25				

† See this footnote at end of state.

Kansas—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Rice—Continued																				
Welch	1924							4,293,850												
Welch, E.	1941			1	14	14	[4]3,209	[4]3,209							1	1				
Welch, N.	1937							44,961												
Wenke	1935			9	317	35	100,989	442,711							1	1				
Wenke-Raymond																				
Wenke, West	1938			2	41	20	17,278	61,844												
West Trapp									2							2				
Wherry	1933							7,726,461	2						1	3			1	1
Wherry, East	1937							96,477												
Unclassified									1	1					1	3				
Rooks:																				
Barry, Arbuckle				1	78	78	5,343	5,343												
Baum, Lans., K. C.	1942			1	15	15	3,123	3,123	1							1				
Dopita, Arbuckle	1934			8	214	26	50,968	225,736							1	1				
Dopita, Lans.				2	45	22	17,498													
Dorr, Lans.	1942			1	24	24	3,622	3,622	1							1				
Drach, Lans. K. C.				16	422	26	115,996	423,174	3						1	4				
Erway	1941			1	24	24	8,382	11,099							1	1				
Faubin	1936							42,200												
Gorham									1							1				
Kruse	1928							10,900												
Laton	1927			78	2,178	27	682,056	1,776,052	14						1	15	1			1
Ray, S. E.	1942			1	277	277	8,590	8,590	1						2	3				
Webster	1930			1	37	37	8,597	58,844							1	1				
Westhusin	1936			14	435	31	132,571	527,134	3							3	7			7
Zurich	1934			2	44	22	[6]7,886	125,935												
Unclassified									2							2				
Rush:																				
Otis-Albert	1934			19	852	45	343,440	1,898,837							2	2				
Winget	1936							47,429												
Russell:									3							3				
Anschutz									1							1				
Atherton, Arbuckle	1935			25	499	20	155,875	1,283,973												
Atherton, Lans. K. C.				7	72	10	30,034													
Big Creek, Arbuckle Gorham				53	957	18	489,289	2,413,695	1							1	1			1
Big Creek, Lans. K. C.				3	68	22	25,123													
Big Creek, East	1935			8	73	9	52,769	255,816												
Big Creek, S., Arbuckle				6	117	19	33,664	85,878	1						3	4				
Big Creek, S., Lans. K. C.				6	60	10	52,214													
Boxberger	1935							138,470												
Bunker Hill	1935							70,262												
Coralens									3							3				
Davidson, N. E.	1940							10,042	2						1	3			1	1
Dillner, Arbuckle	1930			2	23	11	[2]2,578	48,530							1	1				
Donovan	1935			3	84	28	33,063	83,289	1						1	2				
Driscoll	1940			2	41	20	9,822	25,272							1	1			1	1
Dubuquet, Arbuckle	1935			4	114	28	38,017	233,136	1							1				
Dubuquet, Lans.	1941			2	52	26	15,242													
Eichman	1935							648,965												
Fairfield	1938							8,181												
Fairfield, N.	1939							173,818												
Fairport	1923							15,015,974	4						2	6	8		2	10
Fairport, N.															1	1				
Forest Hill	1941			5	161	32	51,964	60,260	3						2	5				
Gideon	1930							40,500												
Gorham, Arbuckle	1926			166	4,911	29	1,604,941													
Gorham, Lans.				127	3,293	25	996,102	22,176,519	11							11	1		1	2
Gorham, Shawnee				8	253	31	104,432													
Gorham, Wabaunsee				1	32	32	10,496													
Greenvale, Arbuckle	1938			29	1,067	36	289,339													
Greenvale, Lans.				23	922	40	237,635	909,955	15						1	16				
Greenvale, North, Howard	1941						1,148													
Greenvale, N. W., Lans.	1941			1	26	26	[5]5,233													
Gustason, Arbuckle	1941			1	24	24	10,270	16,502	3						1	4				
Gustason, Lans.				1	37	37	3,898													
Hall-Gurney, Arbuckle	1931			10	292	29	92,424													
Hall-Gurney, Gorham				40	1,183	29	375,347													
Hall-Gurney, Lans.				376	10,552	28	3,541,999													
Hall-Gurney, Precambrian				3	71	23	25,482	13,612,164	21						5	26	1		1	2
Hall-Gurney, Shawnee				4	136	34	43,990													
Hall-Gurney, Wabaunsee				2	53	26	16,224													
Karst	1935			3			19,475	217,725	3							3				
Lewis	1940							7,150												
Mohl, Gorham	1941			1	14	14	[2]2,101	2,101												
Neidenthal, Lans.-K.C.	1934			1	22	22	8,426	889,174	1							1				
Rusch, Arbuckle				4	161	40	55,520													
Rusch, Lans.-K.C.	1941			2	39	19	9,814	95,997												
Russell, Arbuckle	1934			47	1,056	22	406,854								1	1				
Russell, Lans.	1941			3	60	20	24,894	5,245,581	2						2	4				
Russell, North	1942			1	27	27	3,087													
Sellens, Arbuckle	1929			15	328	22	114,818													
Sellens, Lans.				9	189	21	64,479	2,765,582											1	1
Sellens, Shawnee				1	23	23	7,662													
Steinert	1936							39,092												
Trapp, Arbuckle	1939			739	25,094	34	8,041,602													
Trapp, Conglom.				1	28	28	9,877													
Trapp, Lans.-K.C.				121	4,122	34	1,255,536	34,807,405	32					3	6	41	3		1	4
Trapp, Shawnee				4	111	27	38,584													
Trapp, W., Arbuckle	1939			17	468	27	[3]53,010	148,223												
Vaughan, Arbuckle				4	103	25	29,879													
Vaughan, Gorham				1	28	28	9,251	1,332,321	2							2	3			3
Vaughan, Lans.-K.C.	1937			24	853	35	285,320													
West Trapp									6						1	7				
Williamson	1936							52,823												
Witt, Lans.-K.C.	1942			2	63	31	8,036	8,036	1							1				
Unclassified									2						1	3	2			2
Scott:																				
Shallow Water	1934			9	408	45	120,261	1,159,873												

†See this footnote at end of state.

Kansas—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
					Daily at End of 1942															
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Sedgwick:																				
Cross	1929							73,030												
Eastborough	1929							8,058,700												
Eastborough, North	1938							4,400												
Goodrich	1928			33	938	28	297,143	3,207,743												
Greenwich	1929			742	638	15	[7]19,140	9,326,300									1			1
Kuske	1929							139,690												
Ontville	1937							11,590												
Robbins	1929							2,959,547							1	1				
Valley Center	1928							20,226,359	2							2				
Unclassified									1							1				
Stafford:																				
Ahnert	1941				16	16	8,571	14,488												
Bedford, Arbuckle	1940	*		22	648	29	300,135	482,064	7						1	8				
Curtis	1942	*		1	84	84	2,595	2,595	1							1				
Drech, East									2							2				
Fischer	1938			3	99	33	29,749	141,663	1							1				
Gates	1933			11	367	33	123,307	812,225							1	1				
Hazel, Arbuckle	1942	*		2	117	58	13,524	13,524	2							2				
Jordan	1936			7	405	58	112,933	373,310												
Kipp	1937			8	476	59	101,119	246,110	2						1	3				
Leesburgh	1938			13	1,297	99	279,399	566,781	3						1	4				
McNaughten									1						1	2				
Macksville	1941			2	20	10	8,410	23,816												
Max, Arbuckle	1938			10	396	39	109,355	252,055	2						1	3				
Max, Lans.-K.C.				2	59	59	19,267													
Mueller, Arbuckle	1938			2	15	7	[9]86,614	184,484												
Stafford:									1							1				
Nas																				
Rattlesnake	1938			1	18	18	13,371	43,519												
Richardson	1930			60	2,177	36	657,094	5,056,160									1			1
Riley	1940			1	36	36	12,437	24,398												
Seesburg									1							1				
St. John	1935			24	909	37	310,962	1,266,830												
Shaffer, Arbuckle	1941						7,688	127,260							2	2				
Shaffer, Lans K. C.	1941			6	158	26	70,032													
Sittner, Arbuckle	1937			4	62	13	21,725	217,312												
Sittner, Lans.				2	37	18	14,765													
Sittner, S., Arb.	1938			18	705	39	223,928	584,403												
Snider, Simpson	1936			2	73	36	23,978	222,248												
Snider, S., Simpson	1938			8	269	33	90,638	221,787												
Stafford, Arb.	1941			1	38	38	10,838	607,274	3						2	5				
Stafford, Viola	1940			20	1,464	73	390,186													
Zenith	1937	*		308	11,084	36	3,615,565	10,377,291	11							11	2		1	3
Unclassified									1						2	3				
Stevens:																				
Hugoton										10						10				
Sumner:																				
Anness	1937			1	33	33	10,548	54,846												
Caldwell	1929							1,338,950												
Churchill	1926							18,475,957												
Geuda Springs															1	1				
Latta	1927			15	275	11	89,907	272,139												
North Vernon	1915			7	167	24	43,630	294,626	7						2	9				
Oxford	1927							14,489,875												
Oxford, W.	1926							499,374												
Padgett	1924							1,929,338							1	1				
Rainbow Bend, W.								400,000												
Rutter	1926			2	27	13	[4]5,612	63,093												
Wellington	1929						[1]	4,814,702												
Zyba	1937			2	38	19	8,064	26,018							2	2				
Unclassified									1							1				
Trego:																				
Gugler	1936							20,278												
Wakeeney	1934							427,495												
Woodson:																				
Batesville															1	1				
Quiney															1	1				
Winterscheid									1							1				
Unclassified															1	1				
Total, above data				9,651	268,618	28	82,044,774	844,432,403	846	82	...	...	1	11	300	1,240	43	1	18	62
Kansas, Unclassified				12,709	24,143	2	15,800,226	431,251,597												
Total Kansas		† 336	† 22,024	† 22.360	292,761	13	97,845,000	1,275,684,000	846	82	...	...	1	11	300	1,240	43	1	18	62

† Nearly all oil producing wells in Kansas are pumping. Conservation Division of Kansas State Corporation Commission estimated only 336 flowing wells in state in December, 1942, and 22,024 artificial lift wells; but breakdown by fields not available for presentation here. * Field believed to have flowing well or wells, but definite data not available.
[1] Gas field. [2] January through April; well data as of April. [3] January through May; well data as of May. [4] January through June; well data as of June. [5] January through July; well data as of July. [6] January through August; well data as of August. [7] January data. [8] Old area revived. [9] Includes March overproduction of 81,136 bbls.

Kentucky

County:																				
Breckenridge									1						1	2				
Butler									1							1				
Daviess									18	2			1		20	41				
Hancock									2						4	6			1	1
Henderson									23						11	34				
Hopkins															2	2				
Logan															1	1				
McLean									3							3	1		1	2
Muhlenberg															1	1				
Ohio									3						7	10				
Union									16						8	24				
Webster									2						3	5	2			2
Total Kentucky	1860		14,300	14,300	15,300	1	4,198,000	176,121,000	69	2	...		1	...	58	130	3		2	5

Louisiana

PARISH AND FIELD	Year Found	‡OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					‡Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
North Louisiana	.....	552	3,865	4,417	98,678	22	[a]33,559,711	[a]571,984,126	272	26	4	...	...	...	61	363	...	...	...	...
South Louisiana	.....	1,844	1,059	2,903	235,612	81	[b]90,251,456	[b]717,922,575	313	14	7	...	...	...	110	444	...	...	...	...
Total Louisiana	.....	2,396	4,924	7,320	334,290	46	[c]123,811,167	[c]1,289,906,701	585	40	11	...	...	...	171	807	...	...	...	...

[a] Including for 1942 about 3,500,000 barrels of condensate and similar light oil and about 450,000 barrels of allowable production which apparently was not actually produced. After these deductions, indicated crude production for 1942 was about 29,600,000 barrels.

[b] Including for 1942 around 850,000 barrels of condensate and about 2,600,000 barrels of allowable production which apparently was not actually produced. After these deductions, indicated crude production for 1942 was about 86,800,000 barrels.

[c] Including for 1942 around 4,350,000 barrels of condensate production and about 3,050,000 barrels of allowable production not actually produced. After these deductions, indicated crude production for 1942 was about 116,400,000 barrels.

North Louisiana

Bienville:																			
Bear Creek	1937	6	.....	6	*42	7	*15,000	*60,000	.....	...	...	...	...	...	.....	.....	...	...	...	...
Driscoll	1936	4	.....	4	*22	5	*8,000	*20,000	.....	...	...	...	...	...	.....	.....	...	...	...	...
Lake Bistineau	.....	17	.....	17	*28	2	*10,039	*23,599	.....	...	...	...	...	...	.....	.....	...	...	...	...
Bossier:																			
Bellevue	1921	.....	150	150	600	4	217,945	10,611,211	1	1	...	...	...	...	3	5	...	...	...	...
[6]Carterville-Sarepta	1922	.....	25	25	240	10	87,695	2,844,780	.....	...	1	...	...	...	.....	1	...	...	...	...
Carterville, North	1942	.....	1	1	.....	.....	.....	.....	1	...	...	...	...	...	.....	1	...	...	...	...
Elm Grove	1916	.....	39	39	310	8	114,110	3,540,813	.....	...	...	...	...	...	.....	.....	...	...	...	...
Sligo, Oil	1922	46	.....	46	2,420	54	833,300	3,468,047	11	...	...	...	...	...	1	12	...	...	...	...
Sligo, Condensate	.....	.....	.....	.....	*80	.....	*32,385	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Caddo:																			
Caddo-Pine Island-Hosston-Dixie-Vivian	1904	.....	1,443	1,443	7,800	5	2,985,700	155,748,238	41	1	...	...	...	...	17	59	...	...	...	...
Longwood (Blanchard)	1926	2	2	4	*10	2	*3,500	*7,500	.....	...	...	...	...	...	.....	.....	...	...	...	...
Rodessa	1930	.....	355	355	12,400	34	4,776,556	74,467,836	...	1	...	...	...	...	.....	1	...	...	...	...
Shreveport	1913	9	38	47	3,150	67	1,109,350	5,685,495	3	...	...	...	...	...	.....	3	...	...	...	...
Waskom-Bethany	1924	5	.....	5	*15	3	*4,500	30,500	...	...	...	...	...	...	.....	.....	...	...	...	...
Catahoula:																			
Cypress Bayou	.....	.....	1	1	90	90	65,475	108,475	1	...	...	...	...	...	.....	1	...	...	...	...
[2]Lake Larto	1941	1	.....	1	75	75	36,291	47,070	...	...	...	...	...	...	2	2	...	...	...	...
Manifest	1942	.....	1	1	72	72	2,232	2,232	1	...	...	...	...	...	.....	1	...	...	...	...
Willow Lake	1941	.....	210	210	270	1	94,365	99,633	...	...	...	...	...	...	1	1	...	...	...	...
Claiborne:																			
Haynesville, Tokio (2500 ft.)	1919	.....	275	275	2,400	9	702,850	74,761,334	.....	...	...	...	...	...	.....	.....	...	...	...	...
Haynesville, Pettit (5500 ft.)	1941	127	3	130	15,000	115	3,503,958		118	...	...	...	...	...	1	119	...	...	...	...
Homer	1919	.....	322	322	2,900	9	1,066,060	70,898,060	2	...	...	...	...	...	2	4	...	...	...	...
[4]Lisbon	1936	7	147	154	2,586	16	993,253	10,232,534	...	...	...	...	...	...	1	1	...	...	...	...
Sugar Creek	1931	13	.....	13	1,440	111	488,052	1,572,441	4	...	...	...	...	...	1	5	...	...	...	...
Concordia:																			
Lake St. John	1942	8	.....	8	600	75	77,943	77,943	7	1	1	...	...	...	1	10	...	...	...	...
DeSoto:																			
Ajax	1941	.....	1	1	10	10	3,500	7,000	.....	...	...	...	...	...	.....	.....	...	...	...	...
[5]Bull Bayou-Naborton	1912	.....	87	87	1,025	12	403,100	57,165,419	.....	...	...	...	...	...	2	2	...	...	...	...
Grand Cane	1941	2	.....	2	20	10	7,000	7,000	1	...	...	...	...	...	.....	1	...	...	...	...
Grogan	1937	.....	.....	.....	.....	.....	.....	28,671	.....	...	...	...	...	...	.....	.....	...	...	...	...
Holly	1930	.....	4	4	50	12	18,000	1,016,000	.....	...	...	...	...	...	.....	.....	...	...	...	...
Logansport-Joaquin	1938	7	.....	7	*25	4	*9,000	*35,000	.....	3	...	...	...	...	.....	3	...	...	...	...
[1]Pleasant Hill	1927	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	.....	.....	...	...	...	...
Simsboro	1935	2	.....	2	*10	5	*3,000	*7,500	.....	...	...	...	...	...	.....	.....	...	...	...	...
Grant:																			
[3]Tullas-Urania-Georgetown	1925	.....	290	290	2,100	7	751,500	25,859,834	.....	...	...	...	...	...	.....	.....	...	...	...	...
LaSalle:																			
Catahoula Lake	1942	1	1	2	152	76	23,256	23,256	1	...	...	...	...	...	2	3	...	...	...	...
Cypress Bayou	1941	.....	1	1	100	100	65,475	108,884	.....	...	...	...	...	...	.....	.....	...	...	...	...
Elm Ridge	1942	1	.....	1	131	131	7,991	7,991	2	...	...	...	...	...	.....	2	...	...	...	...
Indian Bayou	1942	.....	1	1	125	125	41,310	41,310	1	...	...	...	...	...	.....	1	...	...	...	...
[2]Larto Lake	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	.....	.....	...	...	...	...
Little Creek	1941	30	32	62	4,028	65	1,348,161	1,774,304	16	...	...	...	...	...	3	19	...	...	...	...
Nebo-Hemphill	.....	34	101	135	8,700	65	3,048,850	3,982,265	56	...	...	...	...	...	11	67	...	...	...	...
Olla and S. Olla	1940	65	127	192	12,371	64	4,652,230	9,877,003	2	...	...	...	...	...	4	6	...	...	...	...
South Jena	1941	7	.....	7	275	40	102,314	202,918	.....	...	...	...	...	...	.....	.....	...	...	...	...
Summerville	1940	20	.....	20	565	28	207,633	253,536	.....	...	...	...	...	...	.....	.....	...	...	...	...
Trout Creek	1940	6	.....	6	342	58	110,201	118,557	1	...	...	...	...	...	4	5	...	...	...	...
[3]Urania	1925	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	.....	.....	...	...	...	...
White Sulphur Springs	1928	.....	.....	.....	.....	.....	.....	12,290	.....	...	...	...	...	...	.....	.....	...	...	...	...
[3]Zenoria	1938	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	.....	.....	...	...	...	...
Lincoln:																			
[4]Lisbon	1938	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	.....	.....	...	...	...	...
Morehouse:																			
Beekman	1942	1	.....	1	.....	.....	.....	.....	.....	...	1	...	...	...	.....	1	...	...	...	...
Monroe (Gas)	1916	.....	.....	.....	.....	.....	Gas	Gas	.....	6	...	...	...	...	.....	6	...	...	...	...
Natchitoches:																			
Miscellaneous	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	1	1	...	...	...	...
Red River:																			
[5]Bull Bayou-Naborton	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	.....	.....	...	...	...	...
Sabine:																			
Converse	1932	.....	76	76	360	5	153,245	2,443,450	1	...	...	...	...	...	1	2	...	...	...	...
[1]Pleasant Hill	1927	.....	26	26	100	4	37,275	1,505,569	.....	...	...	...	...	...	1	1	...	...	...	...
Zwolle	1928	.....	52	52	780	15	338,730	14,766,842	.....	...	...	...	...	...	.....	.....	...	...	...	...
Union:																			
Monroe (Gas)	1916	.....	.....	.....	.....	.....	Gas	Gas	.....	14	...	...	...	...	.....	14	...	...	...	...
Oakland	1923	.....	2	2	10	5	1,370	3,370	.....	...	...	...	...	...	.....	.....	...	...	...	...
Webster:																			
[6]Carterville-Sarepta	.....	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	1	2	...	...	...	...
Cotton Valley:																			
Shallow, gas and heavy oil	1922	.....	22	22	220	10	80,000												
Holloway, light oil	1936	6	30	36	1,553	43	604,342	38,229,015	.....	...	...	...	...	...	.....	.....	...	...	...	...
Bodcaw, gas-distillate	1937	106	.....	106	*11,300	107	*3,355,688												
Bodcaw, light oil	1936	10	.....	10	1,726	172	830,920												
Shongaloo, Shallow	1921	.....	.....	.....	.....	.....	.....	173,500	.....	...	...	...	...	...	.....	.....	...	...	...	...
Shongaloo, Deep	1938	2	.....	2	15	7	5,400												
Sibley	1936	6	.....	6	30	5	11,200	25,500	.....	...	...	...	...	...	.....	.....	...	...	...	...

‡ North Louisiana data for November.

North Louisiana—Continued

PARISH AND FIELD	Year Found	‡OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	‡Daily at End of 1942 Whole Field	‡Daily at End of 1942 Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Winn:																				
Calvin	1942	1	.....	1	5	5	500	500	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
[3]Tullos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
[3]Georgetown	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total, North Louisiana	.....	552	3,865	4,417	98,678	22	†33,559,711	†571,984,126	272	26	4	.....	.....	.....	61	363	.....	.....	.....	.....

* Condensate. † Including about 3,500,000 barrels of condensate and similar light oil in 1942 and about 450,000 barrels of allowable production which apparently was not actually produced. ‡ Pleasant Hill in De Soto-Sabine Parishes. [2] Lake Larto in Catahoula-La Salle Parishes. [3] Tullos-Urania-Georgetown-Zenoria in Grant-La Salle-Winn Parishes. [4] Lisbon in Clairborne-Lincoln Parishes. [5] Bull Bayou-Naborton in De Soto-Red River Parishes. [6] Carterville-Sarepta in Bossier-Webster Parishes.

South Louisiana

Acadia:																				
Bayou Mallet	1936	.....	.....	5	290	58	102,884	531,396	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bosco	1934	.....	.....	50	4,191	84	1,524,728	23,626,767	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Branch	1942	.....	.....	.....	.....	.....	50,375	50,375	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
Jennings	1901	.....	.....	135	12,048	89	4,692,014	85,584,070	2	.....	.....	.....	.....	.....	1	3	.....	.....	.....	.....
Lewisburg	1941	.....	.....	3	50	17	22,731	24,227	1	.....	.....	.....	.....	.....	2	3	.....	.....	.....	.....
North Crowley	1937	.....	.....	38	4,351	115	1,801,021	6,629,644	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Tepetate	1938	.....	.....	.....	.....	.....	5,235	129,328	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Richie	1940	.....	.....	11	645	59	261,740	418,437	2	.....	.....	.....	.....	.....	1	3	.....	.....	.....	.....
South Crowley	1939	.....	.....	1	75	75	36,800	129,360	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tepetate	1935	.....	.....	47	2,800	60	1,091,620	11,586,783	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Allen:																				
North Elton	1939	.....	.....	1	25	25	*14,500	*41,239	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ascension:																				
Darrow	1932	.....	.....	20	1,343	67	549,516	5,522,187	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sorrento	1928	.....	.....	5	125	25	50,565	1,262,554	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Avoyelles:																				
Eola	1939	.....	.....	96	9,351	97	3,476,040	12,088,541	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Beauregard:																				
Bancroft	1938	.....	.....	32	1,320	41	557,635	3,327,377	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Neale	1940	.....	.....	18	2,541	141	930,086	2,102,649	7	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	.....
Calcasieu:																				
Edgerly	1913	.....	.....	18	295	16	129,805	8,593,324	1	.....	.....	.....	.....	.....	3	4	.....	.....	.....	.....
English Bayou	1934	.....	.....	47	1,811	51	784,599	22,231,740	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gillis					591		222,024													
Hayes	1942	.....	.....	1	25	25	*5,250	*5,250	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Iowa	1931	.....	.....	66	5,993	91	2,502,858	48,899,634	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Lockport	1924	.....	.....	22	901	410	340,620	15,837,537	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Starks	1927	.....	.....	26	590	23	184,328	3,445,063	6	1	.....	.....	.....	.....	1	8	.....	.....	.....	.....
Sulphur	1926	.....	.....	68	2,371	35	873,792	16,757,610	5	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....
Vinton	1910	.....	.....	62	1,215	20	463,625	43,828,395	3	.....	.....	.....	.....	.....	5	8	.....	.....	.....	.....
Cameron:																				
Big Lake	1936	.....	.....	.....	.....	.....	.....	74,560	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Black Bayou	1929	.....	.....	22	2,437	111	894,643	9,775,922	6	.....	.....	.....	.....	.....	1	7	.....	.....	.....	.....
Cameron Meadows	1931	.....	.....	33	1,826	55	693,873	9,238,911	1	.....	.....	.....	.....	.....	4	5	.....	.....	.....	.....
Chalkey	1938	.....	.....	33	3,562	108	1,489,169	4,345,095	4	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....
Creole	1938	.....	.....	8	713	89	274,083	1,981,269	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
East Hackberry	1927	.....	.....	61	4,135	68	1,637,769	28,095,414	2	.....	.....	.....	.....	.....	2	4	.....	.....	.....	.....
Grand Lake	1939	.....	.....	22	3,003	137	1,222,944	4,431,646	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakeside (Lowry)	1941	.....	.....	4	25	6	*15,800	*31,069	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
Little Cheniere	1940	.....	.....	.....	.....	.....	.....	11,780	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pecan Lake	1941	.....	.....	.....	.....	.....	*2,931	*7,341	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Sweet Lake	1927	.....	.....	17	1,483	87	610,545	6,112,726	1	.....	.....	.....	.....	.....	2	3	.....	.....	.....	.....
West Hackberry	1927	.....	.....	74	4,611	62	1,913,950	12,144,752	4	.....	.....	.....	.....	.....	2	6	.....	.....	.....	.....
Unclassified	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
East Baton Rouge:																				
University	1938	.....	.....	74	8,831	119	3,325,344	12,062,234	4	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....
Evangeline:																				
Pine Prairie	1912	.....	.....	.....	.....	.....	.....	20,000	21	.....	.....	.....	.....	.....	4	25	.....	.....	.....	.....
Pine Prairie (Deep)	1941	.....	.....	19	2,778	146	823,989	1,079,882	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ville Platte (Shallow)	1937	.....	.....	207	17,558	85	7,153,390	14,843,414	27	.....	.....	.....	.....	.....	2	29	.....	.....	.....	.....
Ville Platte (Wilcox)	1939																			
Iberia:																				
Bayou Pigeon	1940	.....	.....	5	544	109	240,406	611,239	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fausse Point	1937	.....	.....	7	297	42	93,930	177,951	2	.....	.....	.....	.....	.....	2	4	.....	.....	.....	.....
Iberia	1917	.....	.....	87	6,118	70	2,372,814	26,129,857	2	.....	.....	.....	.....	.....	2	4	.....	.....	.....	.....
Jefferson Island	1938	.....	.....	10	1,022	102	378,156	1,245,473	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Rabbit Island		.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Vermilion Bay	1939	.....	.....	3	528	176	143,504	400,418	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Iberville:																				
Avery Island	1942	.....	.....	1	156	156	18,672	18,672	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Bayou Blue	1929	.....	.....	33	1,879	57	761,115	1,636,987	3	.....	.....	.....	.....	.....	2	5	.....	.....	.....	.....
Bayou Choctaw	1931	.....	.....	18	717	40	298,666	3,900,179	.....	.....	.....	.....	.....	.....	3	3	.....	.....	.....	.....
Bayou Des Glaise	1940	.....	.....	.....	.....	.....	.....	4,300	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
St. Gabriel	1941	.....	.....	24	3,468	145	1,318,162	1,853,459	5	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....
White Castle	1929	.....	.....	20	2,392	120	894,632	6,116,537	3	.....	.....	.....	.....	.....	2	5	.....	.....	.....	.....
Jefferson:																				
Barataria	1939	.....	.....	21	3,125	149	1,116,324	2,575,996	2	.....	.....	.....	.....	.....	2	4	.....	.....	.....	.....
Bay De Chene	1942	.....	.....	1	122	122	30,664	30,664	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Hackberry Bay	1941	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
La Fitte	1934	.....	.....	61	9,519	156	3,828,379	30,668,952	5	.....	.....	.....	.....	.....	1	6	.....	.....	.....	.....
Westwego	1941	.....	.....	4	415	104	104,866	158,152	2	.....	.....	.....	.....	.....	1	3	.....	.....	.....	.....
Jefferson Davis:																				
China	1940	.....	.....	.....	.....	.....	.....	*7,392	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lake Arthur (S. Roanoke)	1937	.....	.....	11	500	45	242,915	1,181,027	2	.....	.....	.....	.....	.....	1	3	.....	.....	.....	.....
Nibletts	1940	.....	.....	.....	.....	.....	.....	5,417	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Roanoke	1934	.....	.....	18	1,693	94	636,352	9,669,138	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....
South Elton	1937	.....	.....	1	5	5	*5,800	*64,662	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Jennings	1937	.....	.....	.....	.....	.....	.....	*131,746	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Thornwell	1942	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
Welsh	1903	.....	.....	15	90	6	31,723	699,245	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
West Mermentau	1940	.....	.....	2	94	47	*10,011	*25,983	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Woodlawn	1938	.....	.....	22	1,753	80	768,067	3,482,893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

‡ Data for North Louisiana, for November, for South Louisiana, October; breakdown of wells of South Louisiana by flowing and artificial lift not available by fields, but estimate shown in district total.

Continued on next page

South Louisiana—Continued

PARISH AND FIELD	Year Found	⊙OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	⊙Daily at End of 1942 Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
La Fourche:																				
Camp Bully	1942	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Chacahoula	1938	.....	.....	15	1,606	107	593,109	1,946,131	5	.....	.....	.....	.....	.....	1	6	.....	.....	.....	.....
Delta Farms	1940	.....	.....	11	1,443	131	326,797	507,560	8	.....	.....	.....	.....	.....	1	9	.....	.....	.....	.....
Golden Meadows	1938	.....	.....	188	12,405	66	4,969,163	14,661,291	5	.....	.....	.....	.....	.....	4	9	.....	.....	.....	.....
La Fourche Crossing	1939	.....	.....	2	35	17	*41,500	*506,312	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lake Long	1937	.....	.....	17	1,172	69	436,579	2,263,547	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Leeville	1931	.....	.....	77	2,973	39	1,249,338	25,203,721	3	.....	.....	.....	.....	.....	1	4	.....	.....	.....	.....
Raceland	1938	.....	.....	13	1,433	110	571,487	2,345,128	4	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....
Timbalier Bay	1938	.....	.....	2	125	63	51,725	261,246	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Valentine	1937	.....	.....	19	728	38	285,949	5,426,906	.....	.....	.....	.....	.....	.....	3	3	.....	.....	.....	.....
Orleans:																				
Unknown Pass	1941	.....	.....	1	15	15	*4,550	*7,860	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Plaquemines:																				
Bastian Bay	1941	.....	.....	3	130	43	61,105	72,373	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Delacroix Island	1941	.....	.....	1	138	138	*52,500	*59,859	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Delta Duck Club	1941	.....	.....	2	53	27	34,271	66,861	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Garden Island Bay	1935	.....	.....	32	3,521	110	1,228,736	6,012,607	4	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....
Grand Bay	1938	.....	.....	35	4,860	139	1,954,815	5,757,031	9	.....	.....	.....	.....	.....	.....	9	.....	.....	.....	.....
Lake Hermitage	1934	.....	.....	3	10	3	5,326	162,097	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Lake Washington	1931	.....	.....	7	583	83	125,892	3,189,904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Potash (Deep)	1939	.....	.....	14	1,306	93	607,764	1,651,111	2	.....	.....	.....	.....	.....	1	3	.....	.....	.....	.....
Potash (Shallow)	1938																			
Quarantine Bay	1937	.....	.....	38	5,175	136	2,042,068	7,098,874	4	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....
Stella (Belle Chasse)	1940	.....	.....	8	706	88	216,821	416,681	1	.....	.....	.....	.....	.....	3	4	.....	.....	.....	.....
Venice	1937	.....	.....	22	3,271	149	1,267,589	4,470,503	6	.....	.....	.....	.....	.....	1	7	.....	.....	.....	.....
West Bay	1940	.....	.....	16	1,759	110	732,477	1,157,127	1	1	.....	.....	.....	.....	1	3	.....	.....	.....	.....
Rapides:																				
Big Island	1942	.....	.....	2	15	7	5,670	5,670	2	.....	.....	.....	.....	.....	2	4	.....	.....	.....	.....
Cheneyville	1935	.....	.....	29	2,481	86	945,401	3,782,011	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Deville	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
S. Catahoula	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
St. Bernard:																				
Kenilworth	1939	.....	.....	2	2	1	10,600	121,320	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
St. Charles:																				
Bayou Couba	1942	.....	.....	1	55	55	68,010	68,010	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Bayou des Allemandes	1937	.....	.....	12	555	46	233,959	616,160	5	.....	1	.....	.....	.....	2	8	.....	.....	.....	.....
Lake Salvador	1940	.....	.....	16	2,380	149	817,173	1,470,180	7	.....	.....	.....	.....	.....	1	8	.....	.....	.....	.....
Paradis	1939	.....	.....	41	6,887	168	2,166,936	3,621,581	29	.....	1	.....	.....	.....	1	31	.....	.....	.....	.....
St. James:																				
La Pice	1939	.....	.....	4	244	61	101,278	298,152	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vacherie (Convent)	1940	.....	.....	1	58	58	20,958	105,215	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. John the Baptist:																				
La Place	1939	.....	.....	3	200	66	*73,000	*150,247	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Landry:																				
Cankton	1937	.....	.....	.....	.....	.....	.....	46,372	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kratz Springs	1942	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
Lewisburg	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Port Barre	1929	.....	.....	45	2,588	58	1,026,877	10,751,515	7	.....	.....	.....	.....	.....	3	10	.....	.....	.....	.....
St. Martin:																				
Anse La Butte	1905	.....	.....	65	6,265	96	2,284,712	5,200,847	7	.....	.....	.....	.....	.....	4	11	.....	.....	.....	.....
Anse La Butte, Deep	1941																			
Bayou Bucillon	1928	.....	.....	2	60	30	15,770	562,933	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Happytown	1939	.....	.....	2	312	156	134,000	430,345	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Lake Chicot	1941	.....	.....	5	700	140	219,130	247,173	5	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....
Lake Mongoulois	1939	.....	.....	2	150	75	*54,750	*116,429	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Plumb Bob (Henderson)	1939	.....	.....	3	301	100	127,142	410,361	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Martinsville	1935	.....	.....	2	150	75	69,896	1,302,574	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Section 28 (Hager)	1941	.....	.....	2	120	60	30,755	49,970	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
West Lake Verret	1938	.....	.....	25	2,452	98	869,376	1,824,900	3	1	.....	.....	.....	.....	2	6	.....	.....	.....	.....
St. Mary:																				
Bateman Lake	1937	.....	.....	4	406	102	142,377	1,060,997	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Bayou Sale	1941	.....	.....	21	2,967	141	886,260	1,037,979	16	.....	.....	.....	.....	.....	2	18	.....	.....	.....	.....
Belle Isle	1941	.....	.....	.....	.....	.....	.....	*1,817	.....	.....	.....	.....	.....	.....	4	4	.....	.....	.....	.....
Charenton	1936	.....	.....	140	3,882	28	1,572,761	9,955,514	3	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
Horshoe Bayou	1937	.....	.....	7	980	140	424,988	1,887,111	1	2	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
Jeanerette	1935	.....	.....	20	1,871	94	663,057	10,379,353	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Cote Blanche Bay	1940	.....	.....	11	1,249	114	440,591	885,801	6	.....	.....	.....	.....	.....	1	7	.....	.....	.....	.....
Terrebonne:																				
Bay Baptiste	1939	.....	.....	.....	.....	.....	.....	2,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bay St. Elaine	1937	.....	.....	10	532	53	195,883	856,424	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Caillou Island	1930	.....	.....	49	4,370	89	1,607,244	33,737,910	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Deer Island	1942	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
DeLarge	1938	.....	.....	1	150	150	*43,750	*199,466	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dog Lake Bayou	1929	.....	.....	11	878	80	357,325	2,810,067	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Four Isle Bay	1927	.....	.....	.....	.....	.....	.....	291,329	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gibson	1937	.....	.....	19	2,459	129	1,019,571	6,257,088	4	1	.....	.....	.....	.....	.....	5	.....	.....	.....	.....
Gibson, N. E.	1941	.....	.....	5	897	179	268,074	293,399	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Lake Barre	1929	.....	.....	22	554	25	200,116	17,524,047	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lake De Cade	1942	.....	.....	1	162	162	26,057	26,057	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Lake Felto	1929	.....	.....	13	815	63	285,366	2,713,480	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Lapyrouse	1941	.....	.....	.....	.....	.....	.....	1,187	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Lirette	1937	.....	.....	5	350	70	*127,750	*255,368	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Point Au Fer	1941	.....	.....	.....	.....	.....	.....	110	.....	1	.....	.....	.....	.....	1	2	.....	.....	.....	.....
South Houma	1938	.....	.....	2	273	137	88,634	563,329	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vermilion:																				
Abbeville	1937	.....	.....	11	210	19	58,835	708,877	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Erath	1940	.....	.....	9	462	51	257,737	440,748	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Fresh Water Bayou	1942	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
Gueydan	1932	.....	.....	24	2,285	95	842,593	2,613,605	5	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....
Gueydan, South	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Gueydan, West	1938	.....	.....	7	762	109	197,391	731,210	3	.....	.....	.....	.....	.....	1	4	.....	.....	.....	.....
Whitelake, East	1940	.....	.....	7	719	103	203,560	296,667	4	.....	.....	.....	.....	.....	1	5	.....	.....	.....	.....
West Baton Rouge:																				
Port Allen	1941	.....	.....	4	611	153	178,603	258,943	4	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....
Total South Louisiana	.....	‡1,844	‡1,059	2,903	235,612	81	†90,251,456	†717,922,575	313	14	7	.....	.....	.....	110	444	.....	.....	.....	.....

⊙ Data for October: Breakdown of wells by flowing and artificial lift not available by fields, but estimate shown in district total. * Condensate.

† Including around 850,000 barrels of condensate in 1942 and about 2,600,000 barrels of allowable production which apparently was not actually produced.

‡ Estimated with aid of data furnished by Louisiana Department of Conservation, Minerals Division.

Michigan

COUNTY AND FIELD	Year Found	OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
					Daily at End of 1942															
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Allegan:																				
Allegan	1938	.....	1	1	.....	.....	.....	574	1	.....	.....	.....	.....	.....	2	3	.....	.....	.....	.....
Casco	1940	.....	2	2	3	1	1,192	3,701	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....
Diamond Springs	1938	.....	20	20	125	6	43,354	753,188	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Door	1938	.....	16	16	40	2½	16,278	280,409	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....
Hopkins	1939	.....	4	4	18	5	7,250	114,786	18	.....	.....	.....	.....	.....	8	26	.....	.....	.....	.....
Lee	1941	.....	.....	.....	.....	.....	173	1,903	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Monterey, Sec. 24	1938	.....	.....	.....	.....	.....	Abnd.	176	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Monterey	1938	.....	19	19	65	4	23,500	378,087	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
New Salem	1938	5	80	85	933	11	355,021	3,309,634	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Otsego	1938	.....	.....	.....	.....	.....	.....	134	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Overisel	1938	.....	97	97	517	5	206,180	1,085,562	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....
Overisel, Sec. 11	1940	.....	.....	.....	.....	.....	.....	4,665	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Overisel	1940	.....	1	1	5	5	1,294	279,524	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Overisel	1939	.....	.....	.....	.....	.....	.....	699,613	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Salem	1937	.....	160	160	415	3	162,837	2,946,945	.....	.....	.....	.....	.....	.....	3	3	.....	.....	.....	.....
Trowbridge	1938	4	34	38	160	4½	58,626	142,512	14	.....	.....	.....	.....	.....	1	15	.....	.....	.....	.....
West Hopkins	1941	1	29	30	350	12	231,398	318,751	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arenac:																				
Adams	1937	14	36	50	3,000	60	857,610	2,408,888	16	.....	.....	.....	.....	.....	12	28	.....	.....	.....	.....
Adams, South	1942	1	4	5	50	10	18,743	18,743	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Clayton	1936	.....	40	40	561	14	189,747	3,651,745	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Deep River	1942	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	3	6	.....	.....	.....	.....
Barry:																				
Hope	1940	.....	1	1	7	7	1,918	5,233	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bay:																				
Gibson	1936	.....	.....	.....	.....	.....	Adnd.	3,573	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kawkawlin	1938	.....	78	78	1,574	20	485,053	711,809	39	.....	.....	.....	.....	.....	.....	39	.....	.....	.....	.....
Berrien:																				
Niles	1940	.....	2	2	.....	.....	.....	228	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Calhoun:																				
Albion	1942	.....	.....	.....	.....	.....	.....	Gas	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Cass:																				
Calvin	1942	.....	1	1	.....	.....	67	67	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Edwardsburg	1940	.....	1	1	Abnd.	.....	53	91	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Unclassified	1930	.....	.....	.....	.....	.....	.....	1,108	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ontwa	1942	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Porter	1930	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Silver Creek	1939	.....	.....	.....	.....	.....	25	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clare:																				
Clare City	1938	.....	2	2	16	8	4,158	20,948	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
East Winterfield	1942	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	1	4	.....	.....	.....	.....
Hamilton	1940	.....	.....	.....	.....	.....	Abnd.	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....
Hatton	1941	.....	.....	.....	.....	.....	1,313	17,106	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Headquarters	1942	.....	.....	.....	.....	.....	‡	‡	13	.....	.....	.....	.....	.....	2	15	.....	.....	.....	.....
Van Horn	1939	5	110	115	2,019	19	887,956	13,045,584*	.....	1	.....	.....	.....	.....	1	2	.....	.....	.....	.....
West Winterfield	1942	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1	3	.....	.....	.....	.....
Winterfield	1940	11	29	40	3,619	90	1,262,828	2,372,550	8	32	.....	.....	.....	.....	7	47	.....	.....	.....	.....
Unclassified, New Fields	1942	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2	3	.....	.....	.....	.....
Clinton:																				
Dallas	1942	.....	1	1	3	3	1,359	1,359	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Genesee:																				
Otisville	1941	.....	1	1	6½	6½	2,331	3,333	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gladwin:																				
Beaverton, North	1935	.....	12	12	50	4	23,399	651,398	3	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
Beaverton, South	1936	.....	20	20	300	15	116,093	347,296	3	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
Bentley	1937	.....	36	36	220	6	75,001	711,826	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Buckeye, South	1936	.....	85	85	280	3	105,109	3,794,092	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Buckeye, North	1937	.....	173	173	1,000	5	390,766	14,697,982	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Grout	1940	.....	3	3	14	5	5,069	17,358	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Secord	1937	.....	.....	.....	.....	.....	Adnb.	12,024	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gratiot, Miscellaneous	1929	.....	.....	.....	.....	.....	Abnd.	228	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pine River	1942	1	.....	1	25	25	4,039	4,039	1	.....	.....	.....	.....	.....	2	3	.....	.....	.....	.....
Huron:																				
Bloomfield	1940	.....	.....	.....	.....	.....	Abnd.	71	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Isabella:																				
Broomfield, Sherman	1934	.....	62	62	444	7	172,686	4,062,704	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Chippewa	1942	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	1	4	.....	.....	.....	.....
Currie	1936	.....	2	2	16	8	5,162	154,747	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Deerfield	1942	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Fremont	1938	.....	.....	.....	.....	.....	Abnd.	2,771	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leaton	1929	.....	39	39	331	8	116,636	2,999,532	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mount Pleasant	1928	.....	169	169	960	6	372,425	21,892,791	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sherman, Sec. 18	1940	.....	.....	.....	.....	.....	Abnd.	975	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vernon	1930	.....	23	23	200	9	99,509	4,384,975	1	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Winn	1942	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Wise	1938	5	54	59	600	10	230,195	1,734,027	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kent:																				
Grand Rapids	1942	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1	3	.....	.....	.....	.....
Walker	1938	.....	457	457	1,665	4	694,249	9,025,443	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Wyoming Park	1939	.....	16	16	35	3	14,313	102,777	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lake:																				
Reed City	1942	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	.....
Sauble	1942	.....	5	5	180	36	31,115	31,115	6	.....	.....	.....	.....	.....	5	11	.....	.....	.....	.....
Mason:																				
Mason, Miscellaneous	1934	.....	.....	.....	.....	.....	Abnd.	228	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mecosta:																				
Fork	1942	4	.....	4	556	139	55,661	55,661	4	.....	.....	.....	.....	.....	2	6	.....	.....	.....	.....
Midland:																				
Edenville	1938	.....	26	26	107	4	44,768	1,138,934	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Geneva	1935	.....	.....	.....	.....	.....	Abnd.	60,996	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Larkin	1935	.....	.....	.....	.....	.....	Abnd.	6,940	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lincoln	1939	.....	.....	.....	.....	.....	Abnd.	71	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mount Haley	1935	.....	1	1	4	4	1,371	31,504	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Porter	1931	.....	246	246	2,054	8	880,422	32,554,577	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Yost-Jasper	1932	.....	84	84	900	10	335,699	6,851,816	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Missaukee:																				
Aetna-Prosper	1942	.....	1	1	17	17	1,973	1,973	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Norwich	1942	3	.....	3	60	20	3,239	3,239	3	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
Riverside	1942	.....	1	1	54	54	16,070	16,070	1	4	.....	.....	.....	.....	9	14	.....	.....	.....	.....

‡ Included in Headquarters field, Roscommon County.

Continued on next page

Michigan—Continued

COUNTY AND FIELD	Year Found	OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
					Daily at End of 1942		Year 1942	To End of 1942												
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well			Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Monroe:																				
Deerfield	1935	.....	21	21	166	8	68,630	374,193	1	...	...	...	...	...	1	2	...	...	...	...
Montcalm:							Abnd.	814	.....	...	...	...	...	...	.....	.....	...	...	...	...
Bloomer	1936	.....	.....	.....	.....	.....	Abnd.	4,035	.....	...	...	...	...	...	.....	.....	...	...	...	...
Bushnell	1936	.....	21	21	160	8	62,663	7,210,982	.....	...	...	...	...	...	1	1	...	...	...	...
Crystal	1935	.....	5	5	33	6	13,577	432,722	.....	1	...	...	...	...	.....	1	...	...	...	...
Edmore	1933	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...
Home	1942	.....	1	1	11	11	5,037	32,950	.....	1	...	...	...	...	.....	1	...	...	...	...
Pine	1938	.....	.....	.....	.....	.....	.....	.....	.....	4	...	...	...	...	.....	4	...	...	...	...
Six Lakes	1942	.....	4	4	14	3	7,219	47,431	.....	.....	...	...	...	...	.....	.....	...	...	...	...
Winfield	1936	.....	.....	.....	.....	.....	Abnd.	26	.....	...	...	...	...	...	.....	.....	...	...	...	...
Muskegon:							670	2,185	.....	...	...	...	...	...	.....	.....	...	...	...	...
Blue Lake	1941	.....	1	1	2	2	27,213	6,713,432	.....	...	...	...	...	...	.....	.....	...	...	...	...
Dalton	1940	.....	24	24	66	2½	.....	.....	.....	.....	...	...	...	...	.....	.....	...	...	...	...
Muskegon	1927	.....	.....	.....	.....	.....	Abnd.	487	.....	...	...	...	...	...	.....	.....	...	...	...	...
Oceana:							Abnd.	116,275	.....	...	...	...	...	...	.....	.....	...	...	...	...
Crystal	1941	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...
Oceana, Miscellaneous	1932	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	.....	.....	...	...	...	...
Ogemaw:																				
Ogemaw (West Branch'	1933	.....	220	220	891	4	346,333	4,902,892	1	...	...	...	...	...	5	29	...	...	...	...
Osceola:																				
Evart	1942	12	2	14	1,666	119	193,470	193,470	15	9	...	...	...	...	1	8	...	...	...	...
Lincoln	1942	.....	.....	.....	.....	.....	.....	.....	5	2	...	...	...	...	4	74	...	...	...	...
Reed City	1940	133	56	189	27,399	145	9,048,001	11,804,283	66	4	...	...	...	...	.....	3	...	...	...	...
Winterfield	1942	.....	.....	.....	.....	.....	.....	.....	.....	3	...	...	...	...	.....	.....	...	...	...	...
Otsego:																				
Otsego	1942	.....	.....	.....	.....	.....	.....	.....	.....	2	...	...	...	...	.....	2	...	...	...	...
Ottawa:																				
Grand Rapids (Walker-Tallmadge)	1942	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	.....	1	...	...	...	...
Holland	1940	.....	1	1	3½	3½	1,619	13,166	.....	.....	...	...	...	...	.....	.....	...	...	...	...
Jamestown	1941	.....	.....	.....	.....	.....	52	52	.....	.....	...	...	...	...	1	1	...	...	...	...
Marne	1940	.....	2	2	7	3	2,074	2,074	.....	.....	...	...	...	...	.....	.....	...	...	...	...
Polkton	1942	.....	1	1	.....	.....	246	246	1	...	...	...	...	...	3	4	...	...	...	...
Tallmadge	1942	.....	.....	.....	.....	.....	.....	.....	1	1	...	...	...	...	.....	2	...	...	...	...
Tallmadge, Sec. 5	1940	.....	.....	.....	.....	.....	.....	1,647	.....	.....	...	...	...	...	.....	.....	...	...	...	...
Tallmadge, South	1939	.....	49	49	230	5	88,514	298,777	.....	.....	...	...	...	...	.....	.....	...	...	...	...
Tallmadge, West	1942	.....	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	1	1	...	...	...	...
Wright	1942	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	.....	2	...	...	...	...
Zeeland, South	1942	.....	7	7	266	39	37,160	37,160	.....	.....	...	...	...	...	.....	.....	...	...	...	...
Zeeland	1939	.....	1	1	.....	.....	683	9,300	6	...	...	...	...	...	4	10	...	...	...	...
Unclassified, New Fields	1942	.....	1	1	.....	.....	.....	.....	1	...	...	...	...	...	.....	1	...	...	...	...
Roscommon:																				
Headquarters	1941	30	7	37	7,333	199	2,257,097	2,571,867	16	...	...	...	...	...	2	18	...	...	...	...
Richfield	1941	6	4	10	266	26	69,898	71,475	10	...	...	...	...	...	.....	10	...	...	...	...
Roscommon	1942	.....	.....	.....	.....	.....	.....	.....	4	...	...	...	...	...	.....	4	...	...	...	...
Unclassified	...	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	1	1	...	...	...	...
Saginaw:																				
Birch Run	1934	.....	26	26	23	1	8,776	199,003	.....	...	...	...	...	...	.....	.....	...	...	...	...
Fremont	1937	.....	.....	.....	.....	.....	Abnd.	1,601	.....	...	...	...	...	...	.....	.....	...	...	...	...
Lakefield	1937	.....	1	1	3	3	1,014	5,657	.....	...	...	...	...	...	.....	.....	...	...	...	...
Richland	1935	.....	.....	.....	.....	.....	Abnd.	1,871	.....	...	...	...	...	...	.....	.....	...	...	...	...
Saginaw	1925	.....	51	51	63	1	20,831	1,394,905	.....	...	...	...	...	...	.....	.....	...	...	...	...
Shiawassee:							Abnd.	236	.....	...	...	...	...	...	.....	.....	...	...	...	...
Shiawassee, Miscellaneous	1930	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...
Tuscola:																				
Akron	1938	.....	7	7	110	16	38,806	129,313	2	...	...	...	...	...	.....	2	...	...	1	1
Akron, South	1941	.....	1	1	17	17	5,937	6,688	.....	...	...	...	...	...	.....	.....	...	...	...	...
Wisner	1936	.....	.....	.....	.....	.....	Abnd.	543	.....	...	...	...	...	...	1	1	...	...	...	...
Van Buren:																				
Bangor	1939	.....	15	15	200	13	84,424	377,040	3	...	...	...	...	...	5	8	...	...	...	...
Bangor, North	1942	.....	2	2	40	20	2,000	2,000	3	...	...	...	...	...	.....	3	...	...	...	...
Bloomingdale	1938	.....	96	96	700	7	292,204	5,708,183	14	...	...	...	...	...	7	21	...	...	...	...
Columbia	1938	.....	54	54	267	5	103,342	1,966,849	.....	...	...	...	...	...	3	3	...	...	...	...
Geneva	1940	.....	1	1	6	6	3,057	13,105	1	...	...	...	...	...	.....	1	...	...	...	...
Mill Lake	1938	.....	16	16	140	9	60,585	432,413	.....	...	...	...	...	...	1	1	...	...	...	...
Muskrat Lake	1941	.....	52	52	716	13	107,241	219,650	2	...	...	...	...	...	1	3	...	...	...	...
Porter	1939	.....	1	1	3	3	1,076	2,866	.....	.....	...	...	...	...	.....	.....	...	...	...	...
Wayne:																				
Unclassified	1942	.....	1	1	.....	.....	221	221	1	...	...	...	...	...	.....	1	...	...	...	...
Total Michigan	....	235	2,835	3,070	64,360	21	21,574,903	183,168,189	310	75	...	...	...	...	119	504	...	...	1	1

* Includes Freeman and Redding fields.

Mississippi

Clarke:																				
Irion-Long Bell	1942	.....	*1	*1	.....	.....	.....	.....	*1	...	...	...	...	...	.....	*1	...	...	...	...
Hinds:																				
Jackson (Gas)	1930	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	1	1	...	...	...	...
Madison:																				
Pickens-Sharpsburg	1941	.....	7	7	1,440	205	305,150	312,903	5	...	...	...	...	...	1	6	...	...	...	...
Sharkey:																				
Cary	1941	.....	1	1	69	69	10,200	13,778	1	...	...	...	...	...	.....	1	...	...	...	...
Yazoo:																				
Pickens	1940	.....	2	2	300	150	126,800	623,053	1	...	...	...	...	...	.....	1	...	...	...	...
Tinsley	1939	.....	338	338	56,561	167	28,218,300	47,820,564	28	...	...	...	...	...	8	36	...	...	...	...
Total Mississippi	....	.....	348	348	58,371	168	28,660,450	48,770,298	36	...	...	...	...	...	10	46	...	...	...	...

* Clarke County discovery well (See year's discoveries) reported sanded up soon after completion in December, 1942.

Missouri

COUNTY AND FIELD	Year Found	OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	[o]Daily at End of 1942 Whole Field	[o]Daily at End of 1942 Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Bates	....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Caldwell	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....
Platte	....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....
Total Missouri	1889	.....	94	94	100	1	45,000	230,000	4	2	.....	.....	.....	.....	2	8	.....	.....	.....	.....

Montana

Big Horn:																				
Hardin	....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Soap Creek	1921	.....	6	6	.....	.....	Shut-in	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Carbon:																				
Dry Creek	1930	.....	7	7	311	44	107,072	1,958,949	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elk Basin	1915	.....	.....	.....	.....	.....	.....	1,021,438	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fallon:																				
Cedar Creek	1936	.....	2	2	.....	.....	Shut-in	27,287	.....	5	.....	.....	.....	.....	.....	5	.....	.....	.....	.....
Garfield:																				
Mosby Dome	1936	.....	2	2	.....	.....	Shut-in	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glacier:																				
Cut Bank	1932	.....	703	703	15,422	22	5,506,131	31,524,139	83	1	.....	.....	.....	.....	5	89	.....	.....	.....	.....
Twin Rivers	1942	.....	1	1	.....	.....	Shut-in	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Liberty:																				
Sweet Grass Hills	1917	.....	.....	.....	.....	.....	.....	108,375	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Petroleum:																				
Cat Creek	1920	.....	118	118	362	3	135,796	15,143,678	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Phillips:																				
Bowdoin	1916	.....	.....	.....	.....	.....	.....	.....	.....	26	.....	.....	.....	.....	2	28	.....	.....	.....	.....
Colorado	....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
Pondera:																				
Conrad Butte	1942	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Pondera	1928	.....	156	156	705	5	266,326	6,211,490	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tarrant's de Staffany 1	1942	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Stillwater:																				
Lake Basin	1927	.....	5	5	.....	.....	Shut-in	462,773	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Toole:																				
Apex	1942	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Border (Red Coulee)	1930	.....	11	11	27	2	7,914	1,093,346	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kevin-Sunburst	1922	.....	1,233	1,233	5,694	5	1,970,562	41,604,303	41	6	.....	.....	.....	.....	11	58	.....	.....	.....	.....
Valley:																				
Bowdoin	....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Total Montana	....	.....	2,244	2,244	22,521	10	7,993,801	99,155,778	126	46	...	...	...	...	18	190	...	...	...	...

Nebraska

Richardson:																				
Barada	1941	.....	15	15	969	65	374,550	408,950	7	...	...	...	...	...	.....	7	...	...	...	.....
Dawson (Ogle)	1940	.....	7	7	73	10	15,300	19,100	1	...	...	...	...	...	.....	1	...	...	...	.....
Falls City	1939	.....	56	56	1,839	33	949,800	2,997,950	2	...	...	...	...	...	2	4	1	...	...	1
Shubert	1940	.....	10	10	73	7	40,200	117,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total Nebraska	....	.....	88	88	2,953	34	1,379,850	3,543,300	10	...	...	...	...	...	2	12	1	...	...	1

New Mexico

(Data compiled with assistance of New Mexico Oil Conservation Commission, Santa Fe and Hobbs)

Chaves:																				
Comanche	1936	.....	3	Σ3	Σ7	2	Σ2,500	11,977	.....	...	...	...	...	...	.....	.....	...	...	...	...
New Field (Brown State)	1942	.....	1	1	2	2	Σ200	Σ200	1	...	...	...	...	...	.....	1	...	...	...	...
Eddy:																				
Anderson	1942	27	4	31	332	11	*43,584	*43,584	.....	...	...	...	...	...	.....	.....	...	...	...	...
Artesia	1923	4	168	172	482	3	202,790	7,034,800	.....	...	...	...	...	...	.....	.....	...	...	...	...
Barber	1936	.....	19	19	499	26	216,320	362,813	.....	...	...	...	...	...	.....	.....	...	...	...	...
Black River	1937	.....	.....	.....	.....	.....	.....	3,509	.....	...	...	...	...	...	.....	.....	...	...	...	...
Dayton	1940	8	.....	8	6	1	20,668	59,557	.....	...	...	...	...	...	.....	.....	...	...	...	...
Getty	1928	.....	5	5	262	52	90,702	579,451	.....	...	...	...	...	...	.....	.....	...	...	...	...
Grayburg-Jackson	1936	153	42	195	4,597	24	*1,574,249	*11,667,145	.....	...	...	...	...	...	.....	.....	...	...	...	...
High Lonesome	1939	.....	5	5	4	1	*118,374	*139,266	.....	...	...	...	...	...	.....	.....	...	...	...	...
Leo	1939	2	5	7	45	6	26,003	81,084	.....	...	...	...	...	...	.....	.....	...	...	...	...
Leonard	1929	16	9	25	384	15	*214,627	*1,514,917	.....	...	...	...	...	...	.....	.....	...	...	...	...
Loco Hills	1939	159	30	189	4,519	24	1,563,775	6,117,086	.....	...	...	...	...	...	.....	.....	...	...	...	...
McMillan	1938	.....	.....	.....	.....	.....	.....	81	.....	...	...	...	...	...	.....	.....	...	...	...	...
Red Lakes	1924	.....	59	59	154	3	122,374	616,928	.....	...	...	...	...	...	.....	.....	...	...	...	...
Robinson	1926	2	10	12	79	7	*63,582	*436,944	.....	...	...	...	...	...	.....	.....	...	...	...	...
Russell	1942	.....	4	4	31	8	8,628	8,628	3	...	...	...	...	...	.....	3	...	...	...	...
Shugart	1938	21	12	33	511	15	183,803	646,284	.....	...	...	...	...	...	.....	.....	...	...	...	...
Square Lake	1942	94	1	95	1,361	14	*179,541	*179,541	.....	...	...	...	...	...	.....	.....	...	...	...	...
Vandagriff	1942	.....	1	1	Σ10	10	Σ3,500	Σ3,500	1	...	...	...	...	...	.....	1	...	...	...	...
West Lusk	1942	.....	2	2	79	40	10,882	10,882	2	...	...	...	...	...	.....	2	...	...	...	...
Yates-Stroup	1942	.....	1	1	Σ10	10	Σ200	Σ200	1	...	...	...	...	...	.....	1	...	...	...	...
Unclassified	....	.....	.....	.....	.....	.....	.....	.....	158	1	...	...	...	...	46	205	4	...	...	4
Lea:																				
Arrowhead	1938	111	.....	111	3,890	35	1,169,962	4,031,675	11	...	...	...	...	...	1	12	...	...	...	...
Caprock	1940	.....	1	†1	Shut-in	....	Σ1,500	2,629	.....	...	...	...	...	...	.....	.....	...	...	...	...
Continental-Skaggs	1937	.....	.....	.....	.....	.....	.....	126,363	.....	...	...	...	...	...	.....	.....	...	...	...	...
Cooper	1929	34	52	86	2,363	27	787,353	14,036,638	3	1	...	...	...	...	.....	4	...	...	...	...
Corbin	1938	2	.....	2	34	17	7,825	34,449	.....	...	...	...	...	...	.....	.....	...	...	...	...
Culwin	1942	.....	.....	.....	.....	.....	.....	.....	2	...	...	...	...	...	.....	2	...	...	...	...
East Lusk	1942	1	3	4	118	30	23,148	23,148	3	...	...	...	...	...	.....	3	...	...	...	...
Eaves	1929	8	13	21	690	33	225,941	2,420,963	.....	...	...	...	...	...	.....	.....	...	...	...	...

[o] Data for New Mexico for October.

Continued on next page

New Mexico—Continued

COUNTY AND FIELD	Year Found	*OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	*Daily at End of 1942 Whole Field	*Daily at End of 1942 Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Lea (Continued)																				
Eunice	1928	416	70	486	15,371	32	5,244,796	59,737,663	...	...	...	...	...	...	1	1	...	...	...	...
Halfway	1939	...	9	9	247	27	75,185	253,173	2	...	...	...	...	...	1	3	...	...	...	...
Hardy (North Eunice)	1935	90	30	120	1,293	11	524,395	4,457,992	...	...	...	...	...	...	...	...	...	...	...	...
Hobbs	1928	212	41	253	8,597	34	2,979,177	101,080,053	2	...	...	...	...	...	...	2	1	...	...	1
Inglefield	1935	...	...	...	...	...	...	1,700	...	...	...	...	...	...	...	...	...	...	...	...
Jal	1927	8	11	19	366	19	107,010	6,789,704	...	...	...	...	...	...	...	...	...	...	...	...
Langlie	1927	109	13	122	2,639	22	970,718	7,706,957	...	...	...	...	...	...	...	...	...	...	...	...
Lovington		...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	...	...	...
Lynch, Lea	1929	...	10	10	333	33	91,598	7,055,049	...	...	...	...	...	...	1	1	...	...	...	...
Lynn	1929	13	15	28	769	27	260,452	1,869,597	1	1	...	...	...	...	1	3	...	...	...	...
Maljamar	1926	141	17	158	4,704	30	1,659,919	5,411,024	36	...	...	...	...	...	3	39	1	...	...	1
Mattix	1936	132	21	153	2,498	16	936,991	7,493,709	3	...	...	...	...	...	...	3	...	...	...	...
Monument	1934	483	17	500	16,714	33	5,727,489	50,628,483	5	...	...	...	...	...	2	7	1	...	...	1
North Lynch	1929	...	2	2	25	13	7,658	41,095	...	...	...	...	...	...	...	...	...	...	...	...
North Maljamar	1939	...	1	‖1	Shut-in	...	204	2,315	...	...	...	...	...	...	...	...	...	...	...	...
Penrose	1935	152	39	191	2,040	11	813,750	7,731,312	...	...	...	...	...	...	1	1	...	...	...	...
Rhodes	1928	16	1	17	429	25	121,318	517,031	1	2	...	...	...	...	...	3	...	...	...	...
Salt Lake	1941	...	8	8	211	26	59,388	73,418	5	...	...	...	...	...	1	6	...	...	...	...
Skaggs	1936	2	1	3	54	18	21,473	21,473	...	...	...	...	...	...	...	...	...	...	...	...
Skelly	1936	43	39	82	1,015	12	374,703	3,050,727	2	1	...	...	...	...	...	3	...	...	...	...
South Eunice	1939	72	5	77	2,124	28	664,191	5,748,232	...	...	...	...	...	...	...	...	...	...	...	...
South Lovington	1938	31	10	41	1,363	33	451,519	1,632,543	...	...	...	...	...	...	...	...	...	...	...	...
South Maljamar	1939	3	1	4	112	28	46,508	76,475	...	...	...	...	...	...	...	...	...	...	...	...
Vacuum (Fisher-Lowrie)	1929	242	104	346	11,417	33	3,295,611	16,573,851	4	...	...	...	...	...	...	4	...	...	...	...
West Eunice (Empire)	1928	7	12	19	650	34	156,467	459,275	3	...	...	...	...	...	3	6	...	...	...	...
McKinley:																				
Hospah	1927	...	20	‖20	‖125	6	‡50,116	443,095	2	...	...	...	...	...	1	3	...	...	...	...
Red Mountain	1933	...	5	‖5	‖2	½	‖500	5,900	...	...	...	...	...	...	...	...	...	...	...	...
Unclassified	...	...	...	...	...	...	...	...	9	...	...	...	...	...	...	9	...	...	...	...
San Juan:																				
Aztec-Bloomfield	1924	...	5	‖5	‖2	½	756	32,312	...	...	...	...	...	...	...	...	...	...	...	...
Barker Dome (Gas)	1942	...	...	...	...	...	Gas	...	...	1	...	...	...	...	...	1	...	...	...	...
Blanco	1929	...	1	1	‖2	2	‖50	50	...	...	...	...	...	...	...	...	...	...	...	...
Fulcher Basin (Gas)	1934	...	...	...	...	...	Gas	...	...	...	...	...	...	...	...	...	...	...	...	...
Hogback	1922	7	...	7	200	29	70,433	2,295,996	...	...	...	...	...	...	...	...	...	...	...	...
Kutz Canyon (Gas)	1927	...	...	...	...	...	Gas	...	...	...	...	...	...	...	...	...	...	...	...	...
Navajo (Gas)	1942	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...
Rattlesnake	1924	...	40	40	175	4	70,997	4,448,951	...	...	...	...	...	...	...	...	...	...	...	...
Table Mesa	1925	...	6	6	85	14	34,146	499,911	...	...	...	...	...	...	...	...	...	...	...	...
Ute Dome (Gas)	1921	...	...	...	...	...	...	Gas	...	...	...	...	...	...	...	...	...	...	...	...
Unclassified	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	4	...	...	...	...
Total New Mexico	....	2,821	1,004	3,825	94,031	337	31,679,549	346,228,308	261	12	...	...	...	...	62	335	7	...	...	7

* Data for Square Lake in first 8 months of 1942 included with Grayburg-Jackson, High Lonesome and Robinson; data for Anderson in first 8 months of 1942, included with Grayburg-Jackson and Leonard. † Shut-in. ‡ Pipe line runs in August and September, 1942. ‖ Estimated.

Ohio

SUMMARY— *Total Ohio	1860	.....	25,600	25,600	9,300	0.4	3,599,000	595,316,000	235	510	...	...	7	...	359	1,111	6	13	4	23

* Details on well completions, by counties, given below.

COUNTY AND FIELD	NEW WELLS COMPLETED IN 1942					OLD WELLS DRILLED DEEPER IN 1942				COUNTY AND FIELD	NEW WELLS COMPLETED IN 1942					OLD WELLS DRILLED DEEPER IN 1942			
	Oil	Gas	Gas Input	Dry	Total	Oil	Gas	Dry	Total		Oil	Gas	Gas Input	Dry	Total	Oil	Gas	Dry	Total
Ashland	3	25	...	21	49	...	...	...	...	Lucas	...	...	...	1	1	...	...	...	...
Athens	10	16	...	25	51	...	5	1	6	Mahoning	8	...	...	...	8	...	...	...	...
Auglaize	...	...	...	1	1	...	...	...	...	Medina	24	27	7	17	75	1	...	...	1
Belmont	...	1	...	1	2	...	...	...	...	Meigs	3	53	...	24	80	...	3	...	3
Coshocton	7	10	...	10	27	...	...	...	...	Monroe	15	22	...	11	48	1	...	1	2
Cuyahoga	...	7	...	1	8	...	...	...	...	Morgan	7	37	...	19	63	...	...	...	...
Fairfield	...	6	...	2	8	...	...	...	...	Muskingum	13	41	...	17	71	...	...	...	...
Fayette	...	...	...	1	1	...	...	...	...	Noble	9	22	...	17	48	...	...	...	...
Fulton	...	...	...	1	1	...	...	...	...	Perry	80	28	...	36	144	1	...	...	1
Gallia	...	6	...	2	8	...	...	...	...	Portage	...	...	...	1	1	...	...	...	...
Greene	...	1	...	...	1	...	...	...	...	Richland	...	1	...	...	1	...	...	...	...
Guernsey	...	7	...	6	13	...	...	...	...	Seneca	...	...	...	2	2	...	...	...	...
Harrison	...	...	...	1	1	...	...	...	...	Stark	...	14	...	7	21	...	...	...	...
Highland	...	...	...	1	1	...	...	...	...	Summit	2	10	...	4	16	...	...	...	...
Hocking	2	3	...	3	8	...	...	...	...	Tuscarawas	1	21	...	4	26	...	...	...	...
Holmes	2	15	...	11	28	...	...	...	...	Vinton	...	3	...	6	9	...	...	...	...
Jackson	...	8	...	...	8	...	...	...	...	Ward	...	...	...	...	...	1	...	...	1
Jefferson	1	...	...	1	2	...	...	...	...	Washington	28	38	...	25	91	2	4	2	8
Kanawha	...	4	...	...	4	...	...	...	...	Wayne	4	14	...	6	24	...	1	...	1
Knox	3	24	...	38	65	...	...	...	...	Wood	1	...	...	...	1	...	...	...	...
Lawrence	...	5	...	1	6	...	...	...	...	Wyandot	...	...	...	1	1	...	...	...	...
Lewis	...	1	...	...	1	...	...	...	...										
Licking	12	29	...	18	59	...	...	...	...										
Loraine	...	11	...	16	27	...	...	...	...										
											235	510	7	359	1,111	6	13	4	23

* Data for New Mexico for October.

New York

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
*Allegany Field	....	.....	.....	.....	10,600	....	4,075,250	.....	711	3	....	502	....	....	2	1,218	....	....	....	....
‡Bradford Field	....	.....	.....	.....	4,400	....	1,375,750	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N.Y.-Penn. Gas Field:	....	.....	.....	.....	.....	....	.....	.....	.....	3	....	....	....	....	6	9	....	....	....	....
Allegany Co	....	.....	.....	.....	.....	....	.....	.....	.....	1	....	....	....	....	3	4	....	....	....	....
Steuben Co	....	.....	.....	.....	.....	....	.....	.....	.....	.....	....	....	....	....	2	2	....	....	....	....
Tompkins Co	....	.....	.....	.....	.....	....	.....	.....	.....	2	....	....	....	....	1	3	....	....	....	....
Chautauqua Co	....	.....	.....	.....	.....	....	.....	.....	.....	.....	....	....	....	....	1	1	....	....	....	....
‡Total New York	1864	.....	20,300	20,300	15,000	0.7	5,451,000	139,823,000	711	6	....	502	....	....	9	1,228	....	....	....	....

* Data on Allegany include that part of field in Pennsylvania. ‡ Bradford, New York, well completions included with Bradford, Penna.

Oklahoma

Central Oklahoma	....	*	.....	1,832	25,775	14	8,035,325	178,804,925	44	10	....	....	....	....	21	75	2	....	....	2
East Central Oklahoma	....	*	.....	5,997	9,223	21	3,581,500	312,469,500	55	18	....	1	3	....	60	137	4	1	5	10
East Central—Creek County	....	*	.....	5,769	21,210	4	8,197,900	782,988,800	65	15	....	....	13	....	24	117	18	1	5	24
Northern Oklahoma	....	*	.....	1,508	30,518	20	10,242,900	336,633,300	76	5	....	....	....	3	36	120	3	1	3	7
Oklahoma City Area	....	....	.....	1,025	66,500	65	28,017,400	602,688,000	38	1	....	....	....	....	10	49	8	1	1	10
Osage County Area	....	....	.....	7,990	31,250	4	11,843,200	589,426,200	39	9	....	1	3	5	30	87	4	2	2	8
Seminole Area	....	*	.....	4,842	82,992	17	33,954,700	1,183,450,300	157	9	....	....	....	2	64	232	32	....	6	38
Southeastern Oklahoma	....	*	.....	1,647	28,325	17	9,229,100	140,769,800	32	1	....	....	....	....	20	53	4	....	1	5
Southwestern Oklahoma	....	*	.....	7,146	57,132	8	21,201,600	571,431,100	118	15	....	....	....	1	53	187	25	5	14	44
Northeastern Oklahoma	....	....	.....	15,255	15,030	1	5,931,300	359,885,100	....	....	....	....	....	....	....	....	....	....	....	....
Unclassified	....	.....	.....	.....	.....	....	.....	.....	1	12	....	....	....	1	1	15	....	....	....	....
Total Oklahoma	....	†400	†52,611	53,011	367,925	7	140,234,925	5,058,547,025	625	95	....	2	19	12	319	1,072	100	11	37	148
Central Oklahoma																				
Lincoln:																				
Agra, East	1942	.....	.....	.....	.....	....	.....	.....	....	1	....	....	....	....	....	1	....	....	....	....
Agra, North	....	.....	.....	.....	.....	....	.....	.....	1	....	....	....	....	....	1	2	....	....	....	....
Chandler	1924	.....	.....	40	505	13	209,100	12,127,600	1	1	....	....	....	....	1	3	....	....	....	....
Davenport	1924	.....	.....	114	430	4	160,000	12,128,300	....	....	....	....	....	....	....	....	....	....	....	....
Davenport, North	1941	.....	.....	6	55	9	39,100	54,600	....	....	....	....	....	....	2	2	....	....	....	....
Evans	....	.....	.....	1	22	22	13,100	18,700	....	....	....	....	....	....	....	....	....	....	....	....
Kilmers	1942	.....	.....	1	10	10	2,200	2,200	1	....	....	....	....	....	....	1	....	....	....	....
Laffoon	1932	.....	.....	13	425	33	200,700	2,076,100	....	3	....	....	....	....	1	4	....	....	....	....
Mathews	1942	.....	.....	1	15	15	700	700	1	....	....	....	....	....	....	1	....	....	....	....
Morrow	1942	.....	.....	1	....	....	200	200	1	....	....	....	....	....	....	1	....	....	....	....
Peck	1926	.....	.....	....	....	....	....	....	1	....	....	....	....	....	....	1	....	....	....	....
Sac and Fox	1924	.....	.....	141	535	4	249,700	3,325,400	....	....	....	....	....	....	....	....	....	....	....	....
Sac and Fox, West	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....
Skellyville	1925	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1
Sporn	1936	.....	.....	....	....	....	....	....	1	....	....	....	....	....	....	1	....	....	....	....
Sporn, East	1942	1	.....	1	....	....	15,000	15,000	1	....	....	....	....	....	1	2	....	....	....	....
Wilzetta	1934	.....	.....	16	550	34	125,600	1,342,400	....	....	....	....	....	....	....	....	....	....	....	....
Wilzetta, South	1936	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Unclassified	....	.....	.....	.....	.....	....	.....	.....	.....	1	....	....	....	....	3	4	....	....	....	....
Pawnee:																				
Cleveland	1904	.....	.....	.....	.....	....	.....	.....	3	1	....	....	....	....	1	5	....	....	....	....
Garr	....	.....	.....	.....	.....	....	.....	.....	2	....	....	....	....	....	1	3	....	....	....	....
Hallet	1922	.....	.....	.....	.....	....	.....	.....	1	1	....	....	....	....	1	3	....	....	....	....
Keystone	1919	.....	.....	.....	.....	....	.....	.....	....	1	....	....	....	....	....	1	....	....	....	....
Lauderdale	1915	.....	.....	184	525	3	211,700	13,601,200	1	....	....	....	....	....	....	1	....	....	....	....
Mannford	....	.....	.....	.....	.....	....	.....	.....	1	....	....	....	....	....	1	2	....	....	....	....
Maramec	1920	.....	.....	.....	.....	....	.....	.....	....	....	....	....	....	....	1	1	....	....	....	....
Skedee, North	1942	.....	.....	1	20	20	1,500	1,500	1	....	....	....	....	....	....	1	....	....	....	....
Terlton, North	1917	.....	.....	....	....	....	....	....	1	....	....	....	....	....	1	2	1	....	....	1
Watchorn, East	1942	13	.....	13	3,065	236	424,425	424,425	13	....	....	....	....	....	....	13	....	....	....	....
Payne:																				
Coyle	1938	.....	.....	34	4,993	120	1,654,433	4,174,620	1	....	....	....	....	....	....	1	....	....	....	....
Coyle, North	1942	.....	.....	2	75	38	26,600	26,600	2	....	....	....	....	....	....	2	....	....	....	....
Cushing	....	.....	.....	.....	.....	....	.....	.....	3	....	....	....	....	....	1	4	....	....	....	....
Cushing, West	....	.....	.....	.....	.....	....	.....	.....	....	1	....	....	....	....	....	1	....	....	....	....
Garr	1920	.....	.....	.....	.....	....	.....	.....	....	....	....	....	....	....	1	1	....	....	....	....
King	1942	.....	.....	1	....	....	400	400	1	....	....	....	....	....	....	1	....	....	....	....
Mehan, Northeast	1941	.....	.....	3	74	25	53,300	63,700	....	....	....	....	....	....	....	....	....	....	....	....
Olinghouse	1942	.....	.....	1	90	90	16,800	16,800	1	....	....	....	....	....	....	1	....	....	....	....
Orlando, East	1941	.....	.....	3	225	75	86,100	142,000	1	....	....	....	....	....	1	2	....	....	....	....
Ramsey	1938	*	.....	42	4,484	107	1,679,475	6,603,320	....	....	....	....	....	....	....	....	....	....	....	....
Rattlesnake	....	.....	.....	.....	.....	....	.....	.....	2	....	....	....	....	....	....	2	....	....	....	....
Stillwater, West	1940	.....	.....	.....	.....	....	.....	.....	....	....	....	....	....	....	1	1	....	....	....	....
Villa	....	.....	.....	.....	.....	....	.....	.....	1	....	....	....	....	....	....	1	....	....	....	....
Yale-Quay	1914	.....	.....	163	1,535	9	566,100	22,674,200	....	....	....	....	....	....	1	1	....	....	....	....
Unclassified—Central Okla	....	.....	.....	1,050	8,142	8	2,299,092	99,984,960	....	....	....	....	....	....	....	....	....	....	....	....
Total Central Oklahoma	....	*	.....	1,832	25,775	14	8,035,325	178,804,925	44	10	....	....	....	....	21	75	2	....	....	2
East Central Oklahoma																				
McIntosh:																				
Tiger Mountain	....	.....	.....	.....	.....	....	.....	.....	....	....	....	....	....	....	1	1	....	....	....	....
Unclassified	....	.....	.....	.....	.....	....	.....	.....	....	1	....	....	....	....	4	5	....	....	....	....
Muskogee:																				
Boyle	1927	.....	.....	.....	.....	....	.....	.....	....	....	....	....	....	....	1	1	....	....	....	....
Butler	1918	.....	.....	.....	.....	....	.....	.....	....	....	....	....	....	....	1	1	....	....	....	....
Council Hill	1919	.....	.....	.....	.....	....	.....	.....	1	....	....	....	....	....	....	1	....	....	....	....
Haskell	1909	.....	.....	.....	.....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	1	1
Link	1909	.....	.....	.....	.....	....	.....	.....	2	....	....	....	....	....	1	3	....	....	....	....
Muskogee	1904	.....	.....	.....	.....	....	.....	.....	....	....	....	....	....	....	1	1	....	....	....	....
Yahola	1914	.....	.....	.....	.....	....	.....	.....	1	....	....	....	....	....	....	1	....	....	....	....
Unclassified	....	.....	.....	.....	.....	....	.....	.....	....	....	....	....	....	....	3	3	....	....	....	....

† Out of 53,011 oil producing wells in Oklahoma at end of 1942, there were only approximately 400 flowing, according to estimate of Oklahoma Corporation Commission. Figures on the flowing wells, by fields, not available for presentation here. * Flowing well or wells reported in field, but definite data not available for use here.

Oklahoma—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
					†Daily at End of 1942															
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Okfuskee:																				
Baltimore, North	1922	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Bearden	1924	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Blakley	1924	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Brown	1942	.....	.....	1	5	5	2,200	2,200	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Clearview	1927	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Clearview, N. W.	1942	.....	.....	1	.....	.....	1,500	1,500	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Clearview, North	1942	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Deaner	1920	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	1
Fields	1918	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	2	.....	.....	1	1
Gregory	1922	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1	3	.....	.....	.....	.....
Gypsy Hill	1910	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Haydenville	1939	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Hensley	1942	.....	.....	1	6	6	2,600	2,600	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Lyons-Quinn	1921	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1
Midwest	1942	.....	.....	1	100	100	26,300	26,300	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Morris	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Okemah	1921	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Okemah, East	1940	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Okemah, North	1941	.....	.....	9	410	46	61,300	89,400	6	1	.....	.....	.....	.....	1	8	.....	.....	.....	.....
Okemah, West	1941	.....	.....	4	8	2	5,000	44,100	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....
Reed	1942	.....	.....	1	12	12	1,500	1,500	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Sheldon	1916	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	1	1
Weleetka	1913	.....	.....	74	500	7	205,500	6,202,800	2	1	.....	.....	.....	.....	1	4	.....	.....	.....	.....
Willaims	1942	.....	.....	1	Abnd	....	200	200	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Unclassified	.....	.....	.....	.....	.....	.....	.....	.....	5	3	.....	.....	.....	.....	4	12	.....	.....	.....	.....
Okmulgee:																				
Aztec	1917	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	1	5	.....	.....	.....	.....
Bald Hill	1908	.....	.....	762	950	1	369,200	49,572,500	5	1	.....	.....	1	.....	2	9	.....	.....	.....	.....
Beets-Rapp	1920	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Beggs	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Beggs, North	1909	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Beggs, South	1911	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2	3	.....	.....	.....	.....
Brinton	1914	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2	4	.....	.....	.....	.....
Coulton	1907	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Edna, East	1919	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Hamilton Switch	1909	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Montezuma	1918	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Morris	1907	.....	.....	250	335	1	123,900	25,043,400	.....	.....	.....	.....	1	.....	2	3	.....	.....	.....	.....
Natura District	1914	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Nuyaka, West	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Okmulgee	1906	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	2	1	.....	.....	1
Pollyanna	1921	.....	.....	210	305	1	120,400	2,626,100	3	1	.....	.....	1	.....	2	7	.....	.....	.....	.....
Schulter	1907	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	3	.....	1	.....	1
Simmons-Black	1920	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	1
Tiger Flats	1928	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
Tulsa:																				
Bird Creek	1906	.....	.....	1,590	980	1	410,200	70,683,400	1	.....	.....	.....	.....	.....	2	3	.....	.....	.....	.....
Bixby	1916	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2	3	.....	.....	.....	.....
Bowden	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Broken Arrow	1901	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Dawson	1906	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Jenks	1901	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	3	5	.....	.....	.....	.....
Leonard	1916	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Red Fork	1901	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Tulsa	1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Turkey	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Turley	1914	.....	.....	356	195	½	81,400	5,872,800	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Unclassified	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Wagoner:																				
Conley	1942	.....	.....	1	.....	.....	100	100	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Unclassified—																				
East Central Oklahoma	.....	.....	.....	2,875	5,417	2	2,170,200	152,300,600	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....
Total—																				
East Central Oklahoma	.....	.....	.....	5,997	9,223	2	3,581,500	312,469,500	55	18	...	1	3	...	60	137	4	1	5	10
East Central—Creek Co.																				
Creek:																				
Big Pond	1924	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Bristow	1916	.....	.....	132	820	6	306,900	37,807,400	2	.....	.....	.....	.....	.....	3	5	.....	.....	.....	.....
Bristow, North	1922	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	4	8	1	.....	1	2
Bristow, South	1922	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Bruce	1926	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Cushing	1912	.....	.....	1,745	8,300	5	3,068,700	362,428,300	11	.....	.....	.....	.....	.....	1	12	3	.....	.....	3
Deep Fork	1920	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Deep Rock	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1	3	.....	.....	.....	.....
Depew	1915	.....	.....	• 74	995	13	380,900	36,737,300	1	.....	.....	.....	.....	.....	.....	1	1	.....	.....	1
Edna	1940	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Forty-Five	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Glenn	1905	.....	.....	1,770	4,260	2	1,460,700	222,054,800	23	1	.....	.....	13	.....	2	39	13	.....	2	15
Hickory Grove	1942	*	.....	9	110	12	41,200	41,200	7	4	.....	.....	.....	.....	1	12	.....	.....	.....	.....
Kellyville	1934	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	3	.....	1	1	2
Keystone	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Mannford, (Deep)	1922	.....	.....	230	685	3	293,800	6,325,800	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Mannford, (Shallow)	1937																			
Mercer	1923	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Milfay	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Mounds	1915	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	5	.....	.....	.....	.....
Olive	1914	.....	.....	191	320	2	124,100	4,971,800	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Olive, New	1942	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Pickett-Prairie	1916	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Sapulpa	1909	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Sapulpa, South	1910	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Sinclair (Bellview, South)	.....	.....	.....	6	95	16	32,800	48,400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Slick	1913	.....	.....	167	1,210	7	469,400	33,898,100	1	.....	.....	.....	.....	.....	3	4	.....	.....	.....	.....
Tuskegee, East	1925	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Walker	1923	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Wilcox	1919	.....	.....	55	455	8	175,200	3,995,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Unclassified	.....	.....	.....	1,390	3,960	3	1,844,200	74,680,700	2	3	.....	.....	.....	.....	.....	5	.....	.....	.....	.....
Total E. Central—Creek County	.....	*	.....	5,769	21,210	4	8,197,900	782,988,800	65	15	...	...	13	...	24	117	18	1	5	24

†Only 400 flowing wells estimated in Oklahoma, and data by fields not available. Flowing well or wells reported, but data not available.

PRODUCING OIL WELLS, CRUDE OIL PRODUCTION, AND WELL COMPLETIONS IN U. S. FIELDS

Oklahoma—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					†Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Northeastern Oklahoma																				
Craig, Nowata, Rogers, and Washington Counties	.....	.....	.....	15,255	15,000	1	5,931,300	359,885,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total Northeastern Oklahoma	.....	.....	.....	15,255	15,000	1	5,931,300	359,885,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Northern Oklahoma																				
Garfield:																				
Garber	1916	.....	.....	538	1,625	3	610,700	55,757,600	1	1	.....	.....	.....	.....	1	3	1	.....	.....	1
Garfield	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Grant:																				
Deer Creek	1922	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Lamont	1937	.....	.....	1	105	105	59,500	784,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kay:																				
Blackwell	1918	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1	3	.....	.....	.....	.....
Braman	1924	.....	.....	71	645	9	273,900	23,165,600	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Braman, North	1924																			
Dilworth	1917	.....	.....	.....	.....	.....	.....	.....	14	.....	.....	.....	.....	.....	1	15	.....	.....	.....	.....
Hubbard	1924	.....	.....	36	375	10	138,300	8,522,400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mervine	1913	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Ponca City	1917	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Stone	1942	.....	.....	1	8	8	1,800	1,800	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Tonkawa	1921	.....	.....	177	1,710	10	601,200	121,969,500	2	.....	.....	.....	.....	.....	2	4	.....	.....	.....	.....
Vernon	1925	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....
Vernon, South		.....	.....	21	.....	.....	128,800	3,465,400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Unclassified	1942	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2	3	.....	.....	2	2
Logan:																				
Crescent	1933	.....	.....	47	2,940	63	751,800	14,222,400	13	.....	.....	.....	.....	.....	1	14	.....	.....	.....	.....
Crescent, South	1942	.....	.....	1	35	35	8,000	8,000	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Guthrie	1941	*	30	32	2,419	76	1,149,978	1,928,424	9	.....	.....	.....	.....	.....	4	13	.....	.....	.....	.....
Guthrie Townsite	1942	.....	.....	1	450	450	50,000	50,000	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Langston	1934	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Lovell	1928	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	1	3	7	.....	.....	.....	.....
Lovell, South	1934	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Navina	1941	.....	.....	1	.....	.....	300	400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Navina, West	1942	*	.....	6	450	75	151,500	151,500	6	.....	.....	.....	.....	.....	1	7	.....	.....	.....	.....
Unclassified		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Noble:																				
Billings, (Deep)	1935	*	.....	73	5,350	73	2,056,570	8,252,316	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Billings,(Shallow)	1917																			
Liberty	1942	*	.....	3	800	267	116,400	116,400	5	.....	.....	.....	.....	1	6	12	.....	.....	.....	.....
Liberty, East	1942	.....	.....	1	225	225	52,900	52,900	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Lucien	1932	.....	.....	120	3,650	30	1,566,600	29,990,100	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Lucien, East		.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	5	7	1	.....	.....	1
Lucien, North	1936	.....	.....	11	555	50	189,400	1,125,500	3	.....	.....	.....	.....	.....	2	5	1	.....	1	2
Lucien, Northeast	1942	.....	.....	5	850	172	121,500	121,500	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Morrison	1942	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Otoe City	1939	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	1	1	5	.....	1	.....	1
Tonkawa		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	3	.....	.....	.....	.....
Unclassified, Northern Okla.		.....	.....	362	8,326	23	2,213,752	66,947,360	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total Northern Okla.	.....	*	.....	1,508	30,518	20	10,242,900	336,633,300	76	5	.....	.....	.....	3	36	120	3	1	3	7
Oklahoma City Area																				
Cleveland:																				
Moore	1935	.....	.....	21	790	38	290,600	8,581,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oklahoma:																				
Britton	1935	.....	.....	20	210	11	99,600	2,523,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Edmond	1930	.....	.....	76	2,750	36	1,053,700	19,079,600	5	.....	.....	.....	.....	.....	2	7	.....	.....	.....	.....
Edmond, N. E.		.....	.....	8	350	44	82,100	102,900	4	1	.....	.....	.....	.....	.....	5	.....	.....	.....	.....
Edwards		.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Jones	1939	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	2	1	.....	.....	1
Kune		.....	.....	1	15	15	8,800	13,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oklahoma City, Total	1928	.....	.....	781	61,500	79	26,297,315	571,619,200	25	.....	.....	.....	.....	.....	7	32	7	1	1	9
Oklahoma City:																				
Lower Simpson		.....	.....	136	7,309	54	2,941,701	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Upper Simpson		.....	.....	13	220	17	85,866	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Upper Hoover, North		.....	.....	6	51	9	275,952	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wilcox		.....	.....	527	53,746	100	22,295,687	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous		.....	.....	99	174	2	698,109	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Unclassified	1942	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Unclassified, Okla. City Area	.....	.....	.....	118	885	8	185,285	769,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total, Oklahoma City Area	.....	.....	.....	1,025	66,500	65	28,017,400	602,688,000	38	1	.....	.....	.....	.....	10	49	8	1	1	10
Osage County Area																				
Osage:																				
Atlantic	1924	.....	.....	88	790	9	302,200	4,582,800	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Avant	1904	.....	.....	747	2,225	3	780,400	94,685,600	12	.....	.....	1	2	.....	1	16	.....	.....	.....	.....
Avant, West	1905	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....
Barnsdall, West	1922	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Boston	1904	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
Buell	1922	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	2
Bulldog	1920	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Burbank (Osage & Kay)	1920	.....	.....	1,693	9,025	5	3,355,800	208,518,900	3	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
Burbank, South	1926	.....	.....	174	7,473	43	2,653,702	33,429,498	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cleveland		.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Country Club	1923	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Dalton, South		.....	.....	1	35	35	16,800	36,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flat Rock	1906	.....	.....	580	740	1	259,100	40,603,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Happy Hollow	1919	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	1	1
Hickory Creek	1914	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Hominy	1916	.....	.....	.....	.....	.....	.....	.....	3	1	.....	.....	.....	1	1	6	.....	.....	.....	.....
Hominy, East	1918	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Hominy, South	1940	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	1	.....	1
Kasishke	1921	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Manion, North	1920	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....
Naval Reserve	1933	.....	.....	250	2,387	10	942,316	17,953,754	.....	1	.....	.....	.....	.....	2	3	.....	1	.....	1
Nelagoney	1919	.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....	2	5	.....	.....	.....	.....

†Only 400 flowing wells estimated in Oklahoma, and data by fields not available. Flowing well or wells reported, but data not available.

Continued on next page

PRODUCING OIL WELLS, CRUDE OIL PRODUCTION, AND WELL COMPLETIONS IN U. S. FIELDS

Oklahoma—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	†Daily at End of 1942 Whole Field	†Daily at End of 1942 Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr Disposal	Dry	Total	Oil	Gas	Dry	Total
Osage City	1904	.....	.....	61	750	12	288,600	52,992,400	2	1	...	...	1	...	6	10	...	...	...	...
Osage-Hominy	1917	.....	.....	138	620	4	244,600	7,089,600	...	...	...	...	...	...	...	...	1	...	...	1
Pearsonia	1919	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	1	2	3	...	...	...	...
Pershing	1918	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	3	4	...	...	...	...
Pond Creek	1913	.....	.....	.....	.....	.....	.....	.....	2	1	...	...	...	...	...	3	...	...	...	...
Quapaw	1914	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	3	4	...	...	...	...
Ramona	1911	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	...	1	...	...	...	...
Skiatook	1911	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	1	1	...	...	...	...
Wildhorse	1912	.....	.....	398	630	2	247,100	14,240,000	...	...	...	...	...	...	3	3	...	...	...	...
Unclassified, Osage County Area	....	.....	.....	3,860	6,575	2	2,752,582	115,293,448	2	3	...	...	...	1	3	9	2	...	...	2
Total, Osage County Area	....	.....	.....	7,990	31,250	4	11,843,200	589,426,200	39	9	...	1	3	5	30	87	4	2	2	8
Seminole Area																				
Hughes:																				
Adams	1935	.....	.....	10	710	71	259,758	1,581,395	...	...	...	...	...	...	...	...	...	...	...	...
Buchner	1924	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	1	1	...	...	...	...
Fish	1934	.....	.....	142	2,225	16	916,800	18,052,300	...	...	...	...	...	...	...	...	...	...	...	...
Hall	1942	.....	.....	1	.....	.....	700	700	1	...	...	...	...	...	...	1	...	...	...	...
Holdenville, West	1916	.....	.....	107	487	5	189,400	5,313,100	1	1	...	...	...	...	...	2	...	...	...	...
Papoose	1923	.....	.....	56	465	8	188,700	22,039,000	...	1	...	...	...	...	...	1	...	...	...	...
Wetumka, East	1938	.....	.....	.....	.....	.....	.....	.....	2	...	...	...	...	...	...	2	...	...	...	...
Unclassified	....	.....	.....	.....	.....	.....	.....	.....	...	4	...	...	...	...	1	5	...	...	...	...
Okfuskee:																				
Castle	1941	.....	.....	2	155	78	60,600	128,600	...	...	...	...	...	...	...	...	...	...	...	...
Castle, North	1941	.....	.....	3	30	10	26,600	44,200	...	...	...	...	...	...	...	...	1	...	...	1
Castle, South	1941	.....	.....	3	22	7	12,800	28,800	...	...	...	...	...	...	...	...	...	...	...	...
Cromwell	1923	.....	.....	236	2,460	10	947,700	58,076,200	...	...	...	...	...	...	2	2	...	...	...	...
Cromwell, East	1940	.....	.....	62	2,355	38	1,273,393	2,718,152	7	...	...	...	...	...	...	7	3	...	...	3
Cromwell, North	1938	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	1	2	1	...	1	2
Dill	1931	.....	.....	84	985	12	474,100	4,808,300	2	...	...	...	...	...	...	2	...	...	...	...
Olympic	1934	.....	.....	324	1,225	4	493,600	11,880,200	1	...	...	...	...	...	1	2	9	...	...	9
Olympic, North		.....	.....	.....	.....	.....	.....	.....	...	1	...	...	...	...	...	1	...	...	...	...
Rusk	1941	.....	.....	9	1,452	161	545,281	683,397	...	...	...	...	...	...	1	1	...	...	...	...
Pottawatomie:																				
Avoca	1938	.....	.....	17	375	22	204,800	1,334,700	...	...	...	...	...	...	1	1	...	...	...	...
Bebee, North		.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	1	1	...	...	...	...
Beggs, North		.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	1	1	...	...	...	...
Brookaville	1942	*	.....	7	920	131	197,100	197,100	7	...	...	...	...	...	...	7	...	...	...	...
Caldwell	1942	.....	.....	1	Abnd.	.....	400	400	1	...	...	...	...	...	...	1	...	...	...	...
Centerpoint	1942	3	1	4	145	36	46,000	46,000	4	...	...	...	...	...	...	4	...	...	...	...
Earlsboro, Northwest	1942	1	.....	1	25	25	3,600	3,600	1	...	...	...	...	...	...	1	...	...	...	...
Earlsboro, west	1924	.....	.....	.....	.....	.....	.....	.....	2	...	...	...	...	...	1	3	...	...	...	...
Gray	1932	.....	.....	26	79	3	330,700	4,686,300	...	...	...	...	...	...	...	...	...	...	...	...
Hallum	1942	.....	.....	1	.....	.....	300	300	1	...	...	...	...	...	...	1	...	...	...	...
Hotulke		*	.....	44	919	21	423,518	.....	19	...	...	...	...	...	1	20	...	...	...	...
Hotulke, West	1941	.....	.....	28	2,258	81	1,038,303	1,270,957	11	...	...	...	...	...	1	12	...	...	...	...
King	1939	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	1	1	...	...	...	...
King, West	1939	.....	.....	3	4	1	11,300	132,800	...	...	...	...	...	...	...	...	...	...	...	...
Konawa, South		.....	.....	.....	.....	.....	.....	.....	6	...	...	...	...	...	1	7	...	...	...	...
Macomb	1942	.....	.....	2	95	48	27,400	27,400	1	...	...	...	...	...	1	2	...	...	...	...
Maud	1928	.....	.....	59	480	8	193,800	12,267,900	3	...	...	...	...	...	1	4	...	...	...	...
Maud, South	1941	.....	.....	9	270	30	183,200	420,300	...	...	...	...	...	...	...	...	...	...	...	...
Prague	1940	.....	.....	14	645	46	239,904	798,836	14	...	...	...	...	...	1	15	...	...	...	...
Reed	1942	.....	.....	1	7	7	700	700	1	...	...	...	...	...	...	1	...	...	...	...
Romulus	1940	.....	.....	24	645	27	316,856	1,230,188	2	...	...	...	...	...	1	3	...	...	...	...
Romulus, North		.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	...	1	...	...	...	...
Romulus Townsite	1942	.....	.....	1	70	70	18,600	18,600	1	...	...	...	...	...	...	1	...	...	...	...
Shawnee	1934	.....	.....	50	710	14	290,707	3,123,903	...	...	...	...	...	...	...	...	...	...	...	...
Shawnee, North	1937	*	.....	4	355	89	116,546	397,709	...	...	...	...	...	...	...	...	...	...	...	...
Shawnee, Northeast	1942	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	...	1	...	...	...	...
St. Louis	1927	.....	.....	800	1,130	1	5,054,800	159,488,100	12	...	...	...	...	...	5	17	8	...	4	12
St. Louis, East	1941	.....	.....	8	175	22	89,400	181,700	1	...	...	...	...	...	1	2	...	...	...	...
St. Louis, North	1941	.....	.....	32	1,140	36	542,400	872,900	11	...	...	...	...	...	3	14	...	...	...	...
St. Louis, Northeast	1942	.....	.....	1	25	25	1,500	1,500	1	...	...	...	...	...	...	1	...	...	...	...
Tecumseh, East	1941	.....	.....	9	160	18	190,900	400,200	5	...	...	...	...	...	1	6	...	...	...	...
Tecumseh Lake	1941	.....	.....	11	570	52	460,600	943,100	...	...	...	...	...	...	2	2	...	...	...	...
Unclassified		.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	1	5	6	...	...	...	...
Seminole:																				
Allen, Deep	1927	.....	.....	292	3,600	12	1,364,700	52,785,500	...	...	...	...	...	...	...	...	...	...	...	...
Bethel	1925	.....	.....	35	145	4	55,500	1,874,400	...	...	...	...	...	...	...	...	...	...	...	...
Bethel, North	1936	.....	.....	27	79	3	366,329	4,075,108	...	...	...	...	...	...	...	...	...	...	...	...
Bethel, West	1941	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	1	...	1	...	...	...	...
Bowlegs	1926	.....	.....	208	4,890	24	1,899,600	121,024,000	...	...	...	...	...	...	2	2	1	...	...	1
Butnur	1942	.....	.....	1	.....	.....	2,200	2,200	1	...	...	...	...	...	...	1	...	...	...	...
Dill	1941	.....	.....	.....	.....	.....	.....	.....	2	...	...	...	...	...	...	2	...	...	...	...
Dill, South	1941	.....	.....	4	130	33	73,700	139,500	1	...	...	...	...	...	1	2	...	...	...	...
Dora	1935	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	1	2	...	...	...	...
Earlsboro	1926	.....	.....	171	2,850	17	1,122,900	126,597,700	...	...	...	...	...	...	...	...	...	...	...	...
Earlsboro, East	1929	.....	.....	.....	.....	.....	.....	.....	2	...	...	...	...	...	5	7	4	...	...	4
Earlsboro, North	1936	.....	.....	34	2,839	84	1,082,645	6,202,879	...	...	...	...	...	...	...	...	...	...	...	...
Earlsboro, South	1930	.....	.....	26	650	25	306,800	9,149,700	2	...	...	...	...	...	2	4	1	...	...	1
Fish, West	1941	.....	.....	1	16	16	6,200	14,500	1	...	...	...	...	...	1	2	...	...	...	...
Grayson	1935	.....	.....	33	440	13	202,600	2,061,500	...	...	...	...	...	...	...	...	...	...	...	...
Grayson, North	1942	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	...	1	...	...	...	...
Grayson, West	1942	.....	.....	1	30	30	7,300	7,300	1	...	...	...	...	...	1	2	...	...	...	...
Harjo		.....	.....	1	17	17	8,400	10,800	...	...	...	...	...	...	...	...	...	...	...	...
Homestake		.....	.....	1	.....	.....	1,500	2,200	...	...	...	...	...	...	...	...	...	...	...	...
Jennings		.....	.....	3	104	35	19,300	25,500	...	...	...	...	...	...	...	...	...	...	...	...
Keokuk	1933	.....	.....	96	1,950	20	1,011,700	12,599,300	1	...	...	...	...	...	...	1	...	...	...	...
Kidd	1942	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	...	1	...	...	...	...
Konawa	1929	.....	.....	91	800	9	314,800	15,527,800	...	...	...	...	...	...	...	...	...	...	...	...
Konawa, East	1936	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	...	1	...	...	...	...
Konawa, South	1938	.....	.....	35	484	14	233,113	1,212,279	1	...	...	...	...	...	1	2	...	...	...	...
Little River	1927	.....	.....	217	4,725	22	1,878,800	113,598,300	...	...	...	...	...	...	...	...	1	...	...	1
Little River, East	1928	.....	.....	62	440	7	181,000	16,899,100	...	...	...	...	...	...	...	...	...	...	...	...
Little River, North	1941	.....	.....	5	365	73	155,900	296,000	...	...	...	...	...	...	2	2	...	...	...	...
Little River, West	1938	.....	.....	13	270	20	117,900	936,400	...	...	...	...	...	...	...	...	...	...	...	...

†Only 400 flowing wells estimated in Oklahoma, and data by fields not available. Flowing well or wells reported, but data not available.

Continued on page 160

Blocks for Every Purpose

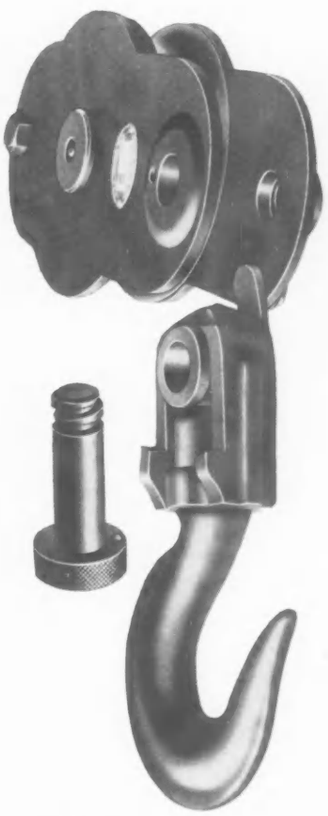
Extra Heavy Self-Locking Snatch Block

Peerless Snatch Block

While the facilities of our plant are primarily devoted to the production of various types of blocks for the Army, Navy and other Defense Industries we have constantly improved the design of many blocks now used in the oil field.

Tubing Block Single Sheave with ball bearing Swivel

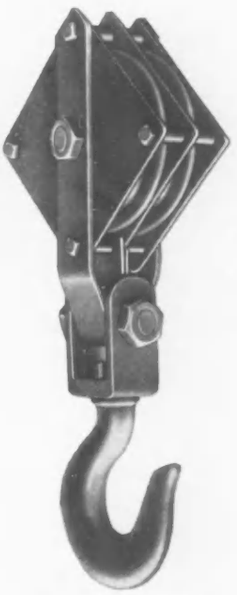
Construction Block



All Steel Heavy Duty Snatch Block

48" x 30" Traveling Block

Safety Floor Block



Heavy Diamond Pattern Wire Line Block

Take good care of your present equipment, and when Victory comes let one of our Field Men check your Block requirements with you. Write for your copy of our new illustrated catalog.

McKISSICK PRODUCTS CORPORATION

TULSA, OKLAHOMA

Oklahoma—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					†Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Osborn	1942			1	5	5	500	500	1							1				
Rosanna	1924			20	225	11	89,000	1,825,300												
Sasakwa	1927			60	770	13	324,900	11,170,400	4	1					4	9	1			1
Searight	1926			55	875	16	334,600	34,593,000							1	1				
Seminole City	1926			194	5,100	26	1,983,500	130,823,200	2						2	4	1			1
Seminole, East	1926			86	750	8	286,600	8,813,400												
Seminole, West	1935			33	1,480	45	583,200	13,795,100												
Shepard				1			200	3,900												
Stockton	1942			1	60	60	4,000	4,000	1							1				
Sylvian	1941			4	175	44	32,900	37,400	4						1	5				
Sylvian, Northeast	1942	1	1	2	110	55	15,700	15,700	2							2				
Transco	1926														1	1				
Trapp	1942			1			500	500	1							1				
Traugh, Deep	1937			38	550	14	151,100	1,853,200												
Traugh, Shallow	1937																			
Velma									1							1				
Wewoka	1923			83	840	10	337,700	40,458,200	2	1						3				
Wewoka, Northeast	1941								2							2				
Wewoka Townsite	1924			27	315	12	123,900	3,288,600												
Unclassified	1942																1		1	2
Unclassified, Seminole Area				583	23,167	40	3,900,747	138,526,397							3	3				
Total Seminole Area		*		4,842	82,992	17	33,954,700	1,183,450,393	157	9				2	64	232	32		6	38
Southeastern Oklahoma																				
Coal:																				
Jesse		*		34	1,781	52	629,350	5,585,101	1							1				
McClain:																				
Byars	1939								2						3	5				
Marshall:																				
Aylesworth	1942								1							1				
Cumberland	1940	54	4	58	8,127	140	2,749,063	5,538,350	15	1					2	18	3			3
Isom Springs	1931								7							7				
Pontotoc:																				
Ada	1928														2	2				
Ada, East	1928														2	2				
Allen, Shallow	1913														1	1				
Bebee	1923			217	2,785	13	1,113,600	13,104,900	2						1	3	1			1
Fitts	1933			614	7,218	12	2,955,119	96,058,614												
Fitts, West	1937								1							1				
Francis, South	1935														1	1				
Jesse	1935														3	3				
Roper	1942			2	225	113	18,300	18,300	2							2				
Wetley									1							1				
Whitney															2	2				
Unclassified, Southeastern Oklahoma				722	8,189	11	1,753,668	20,464,535							3	3			1	1
Total, Southeastern Oklahoma		*		1,647	28,325	17	9,229,100	140,769,800	32	1					20	53	4		1	5
Southwestern Oklahoma																				
Caddo:																				
Apache	1941	23		23	6,076	264	1,743,091	1,917,966	13	1					3	17	4	1		5
Cement	1917	*		328	7,098	22	3,239,239	26,148,860	6	3					3	12	1	2		3
Cement, West										1						1				
Unclassified	1942									1						1	1			1
Carter:																				
Ardmore	1942	2		2	125	63	9,900	9,900	2							2				
Caddo, North	1942	1		1	750	750	49,300	49,300	1						1	2				
Ed Cox	1925								1							1				
Fox (Old Prod. and Deep)	1917			94	715	8	295,700	14,890,300							1	1				
Healdton	1913			1,885	7,475	4	2,826,900	193,376,500												
Hewitt	1919	*		81	2,742	34	1,488,213	93,998,724	10							10	2		2	4
Hewitt, West																				
Sholem Alechem	1923			306	2,050	7	851,900	38,728,400									1			1
Tatums	1927			208	1,530	7	567,500	16,748,100												
Tussy	1933			104	2,750	26	1,070,200	5,445,900	5						1	6				
Unclassified									1							1				
Comanche:																				
Elgin	1942									1						1				
Lawton	1915														2	2				
Cotton:																				
Walters	1917			223	755	3	282,800	25,717,800							1	1				
Garvin:																				
Pauls Valley	1942	14		14	4,500	321	822,900	822,900	12					1	2	15	1		1	2
Robberson	1921			166	800	5	310,100	15,489,100												
Tussy									1							1				
Unclassified									2							2				
Grady:																				
Chickasha										4					2	6				
Knox	1924			176	1,425	8	553,200	15,554,400									3		1	4
Unclassified	1923														2	2				
Jackson:																				
Altus	1934			113	540	5	229,600	1,774,000	1						2	3	1			1
Tipton	1935			57	405	7	165,300	1,840,400	1							1				
Jefferson:																				
Oscar	1924			191	1,080	6	432,200	10,633,000	3						4	7				
McLouth																			1	1
Seay	1924														1	1				
Spring	1924								1							1				
Unclassified	1942								1							1				
Kiowa:																				
Gotebo									1							1				
Hobart	1939								1						5	6	8	1	5	14
Unclassified	1942																	1		1
Stephens:																				
Comanche	1918			146	395	3	146,000	10,543,300							3	3				
Doyle	1921								2							2				
Duncan, West	1919																		1	1

†Only 400 flowing wells estimated in Oklahoma, and data by fields not available. Flowing well or wells reported, but data not available.

Oklahoma—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	†Daily at End of 1942 Whole Field	†Daily at End of 1942 Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Empire	1920	.....	.....	267	2,135	8	789,700	14,787,900	12	...	...	...	...	...	4	16	1	...	...	1
Loco	1915	.....	.....	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...
Loco, West	1941	.....	.....	143	580	4	215,700	3,996,300	6	...	...	...	...	...	2	8	...	...	1	1
Milroy, Deep	1937	.....	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Milroy, Shallow	1916	.....	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Peck	1942	.....	.....	3	12	4	3,300	3,300	3	...	...	...	...	...	...	3	...	...	...	...
Rainola	1921	.....	.....	...	...	...	...	...	1	...	...	...	...	...	1	2	...	...	...	...
Sholem Alechem		.....	.....	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...
Velma	1917	.....	.....	650	1,260	2	838,500	6,960,900	23	2	...	...	...	...	6	31	2	...	2	4
Velma, Deep		.....	.....	2	226	113	44,705	.....	...	...	...	...	...	...	...	...	...	...	...	...
Velma, North	1942	.....	.....	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...
Woolsey, South	1942	.....	.....	6	45	8	38,300	38,300	6	2	...	...	...	...	5	13	...	...	...	...
Tillman:																				
Frederick	1937	*	.....	11	511	46	291,439	1,240,074	1	...	...	...	...	...	...	1	...	...	...	...
Frederick, West	1937																			
Unclassified, Southwestern Oklahoma	....	.....	.....	1,946	11,152	6	3,895,913	70,715,476	....	....	....	....	....	....	....	....	....	....	....	....
Total, Southwestern Oklahoma	....	*	.....	7,146	57,132	8	21,201,600	571,431,100	118	15	....	....	....	1	53	187	25	5	14	44

† Out of 53,011 oil producing wells in Oklahoma at end of 1942, there were only approximately 400 flowing, according to estimate of Oklahoma Corporation Commission. Figures on the flowing wells, by fields, not available for presentation here. * Flowing well or wells reported in field, but definite data not available for use here.

Pennsylvania

SUMMARY—																				
*Bradford Field					35,300		14,083,000		1,493	...	...	1,620	...	...	...	3,113	...	...	...	...
†Kane to Butler					7,365		3,092,500		...	...	...	...	...	...	...	...	...	...	...	...
†Southwest Penna					2,123		808,500		...	...	...	...	...	...	...	...	...	...	...	...
‡Penna. Unclassified									309	285	...	...	...	...	111	705	2	19	6	27
*Total Pennsylvania	1859	.....	84,800	84,800	48,400	0.6	17,984,000	1,021,392,000	1,802	285	...	1,620	...	...	111	3,818	2	19	6	27

* Data on well completions in Bradford include that part of field in New York. † Data on well completions included with Pennsylvania unclassified. ‡ Details on well completions outside Bradford field, by counties, given below.

COUNTY AND FIELD	NEW WELLS COMPLETED IN 1942 Oil	Gas	Gas Input	Dry	Total	OLD WELLS DRILLED DEEPER IN 1942 Oil	Gas	Dry	Total
Allegheny	...	2	...	2	4	...	...	...	...
Armstrong	...	55	...	7	62	...	4	2	6
Butler-Armstrong	33	14	...	13	60	...	...	...	...
Butler	...	1	...	2	3	...	...	...	...
Clarion	...	34	...	9	43	...	...	...	...
Fayette	1	20	...	10	31	...	2	1	3
Greene	1	60	...	5	66	1	10	3	14
Indiana	1	5	...	2	8	...	...	...	...
Kane-Clarendon	126	...	...	...	126	...	...	...	...

COUNTY AND FIELD	NEW WELLS COMPLETED IN 1942 Oil	Gas	Gas Input	Dry	Total	OLD WELLS DRILLED DEEPER IN 1942 Oil	Gas	Dry	Total
Middle District	143	25	...	28	196	...	...	...	...
New York Penn Gas	...	28	...	21	49	...	...	...	...
Potter	...	2	...	...	2	...	...	...	...
Tioga	...	...	...	1	1	...	...	...	...
Washington	4	23	...	11	38	1	3	...	4
Westmoreland	...	16	...	...	16	...	...	...	...
Total Penna. Outside Bradford	309	285	...	111	705	2	19	6	27

Tennessee

(Data compiled with assistance of Tennessee Department of Conservation, Nashville)

County:																				
Clay	.....	.....	8	8	6	1	2,250	.....	.....	...	...	...	...	...	...	...	...	...	...	...
Fentress	.....	.....	2	2	3	2	1,250	.....	.....	2	...	...	...	...	...	2	...	...	...	...
Morgan	.....	.....	15	15	12	1	4,500	.....	.....	...	...	...	...	...	...	...	...	...	...	...
Pickett	.....	.....	2	2	1	½	500	.....	.....	...	...	...	...	...	...	...	...	...	...	...
Scott	.....	.....	3	3	10	3	3,500	.....	.....	...	...	...	...	...	...	...	...	...	...	...
Total Tennessee	....	.....	‡30	‡30	‡32	1	‡12,000	*427,000	.....	2	...	...	...	...	...	2	...	...	...	...

* Only for 1916-1942; production 1876-1915 included with Kentucky in only available statistics. ‡ Estimated.

Texas

East Texas Field		16,906	8,469	25,375	358,238	14	120,835,561	1,821,593,932	10	...	...	...	...	1	6	17	...	...	...	...
Rest of East Texas		1,217	2,712	3,929	83,346	21	31,480,153	624,134,660	231	15	7	2	...	2	44	301	...	1	4	5
North Texas		1,927	17,909	19,836	117,527	6	41,760,080	783,196,563	396	5	1	14	24	1	235	676	29	1	15	45
West Central Texas		411	6,251	6,662	23,252	3	8,768,914	381,431,152	144	24	...	1	...	1	97	267	8	2	2	12
West Texas		7,797	7,245	15,042	212,831	14	81,191,360	1,275,264,503	1,122	13	...	...	...	...	85	1,220	40	...	7	47
Texas Panhandle		43	5,500	5,543	85,690	15	30,868,257	440,425,636	277	63	...	...	...	...	17	357	6	...	1	7
Gulf Coast, Upper		5,393	2,755	8,148	279,039	34	91,340,474	1,489,107,420	265	17	7	...	1	...	66	356	...	...	...	...
Gulf Coast, Lower		3,951	1,338	5,289	131,706	25	46,319,739	376,585,088	504	25	33	...	1	...	96	659	4	1	...	5
Southwest Texas		976	4,878	5,854	47,845	8	19,471,873	239,902,086	174	7	1	...	1	...	78	261	...	1	1	2
South Central Texas	....	60	3,447	3,507	17,471	5	6,399,819	222,099,305	32	1	...	...	...	...	19	52	...	...	...	...
Total Texas	1896	38,681	60,504	99,185	1,356,-945	14	478,436,230	7,653,740,345	3,155	170	49	17	27	5	7 3	4,166	87	6	30	123

†For Oklahoma see end of state, above; for Texas, data for October.

East Texas Field

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	†Daily at End of 1942 Whole Field	†Daily at End of 1942 Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Rusk-Smith-Cherokee:																				
Joiner Area									3							3				
Rusk-Gregg:																				
Kilgore Area									4						2	6				
Gregg-Upshur:																				
Longview Area									3					1	4	8				
Total East Texas Field		16,906	8,469	25,375	358,238	14	120,835,561	1,821,593,932	10					1	6	17				

Eastern Texas (Outside East Texas Field)

Anderson:																				
Boggy Creek	1927		16	16	183	11	72,645	5,119,537												
Camp Hill	1935							289,030												
Cayuga	1934	143	140	283	713	3	4,029,536	25,826,039	5							5				
Cayuga, Trinity	1939	1		1	16	16	5,493	21,262												
Concord	1942		1	1	42	42	13,589	13,589	1						3	4				
Long Lake	1933	122	16	138	3,900	28	1,314,300	5,796,188	7		1				2	10				
Long Lake, East	1941	12		12	383	32	130,524	182,606												
Angelina:																				
[1]Ginter	1937	4		4	18	5	5,837	37,439												
Huntington	1938		1	1	2	2	1,125	14,110												
[2]Redland (Davisville)	1939							56												
Camp:																				
Pittsburg	1940	4	1	5	367	73	94,501	141,607	3							3				
Cass:																				
Kildare									2						1	3				
Rodessa	1935	134	260	394	7,835	20	3,147,982	51,116,426												
Cherokee:																				
Larissa	1942	1		1	21	21	2,575		1							1				
Ponta (Lone Star)	1939		1	1	63	63	16,805	55,924												
Rusk	1934							261,134												
Falls:																				
Lott	1937						3,266	34,275												
Post Oak	1937						1,053	4,639												
Satin	1938							140												
Franklin:																				
Talco	1936							47,134,912	3					1		4				
Freestone:																				
Wortham	1934		29	29	427	15	167,350	22,941,008	1						2	3				
Wortham (Shallow)	1920		2	2	2	1	2,005	10,056												
Gregg:																				
Willow Springs	1938							16,721			1					1				
Harrison:																				
Waskom	1938	1	14	15	54	4	15,043	108,374	1	1						2				
Henderson:																				
Athens	1941							642												
Bazette	1939	6	1	7	54	8[3]	35,567	223,132												
Flag Lake (Haynes)	1937		10	10	185	19[4]	52,178	542,964	2	1					1	4				
Mabank (Rowe & Baker)	1939		2	2	5	3	12,449	93,631												
Opelika	1937							33,187		1	1[5]					2		1		1
Hopkins:																				
Sulphur Bluff	1936	1	72	73	4,248	58	1,547,477	9,585,984				1				1				
Houston:																				
Grapeland	1938	1		1	76	76	25,632	136,477		1	2					3				
Grimes	1942									1						1				
Lovelady									1						2	3				
Navarro Crossing	1938	16	5	21	317	15	133,252	725,787		1						1				
Percilla	1937							30,311		1						1				
Trinity	1934		15	15	289	19	144,115	1,900,985												
Hunt:																				
Wieland (Club Lake)	1942	4		4	187	47	27,393	27,393	6						6	12				
Leon:																				
Buffalo	1938							17,707												
Leon:																		1		
Oakwood	1939							14,241												
Limestone:																				
Barron											1					1				
Cedar Creek	1927							330,600												
Groesbeck	1941	1		1	5	5	2,103	2,246												
Mexia	1921		207	207	1,509	7	567,828	98,367,855							1	1				
Nigger Creek	1926							3,329,544												
Tehuacana	1940		3	3	29	10	10,624	38,148												
Tricities	1941	1		1	34	34	27,676	28,205												
McLennan:																				
South Bosque	1938		35	35	9	¼	4,016	114,649												
Marion:																				
Caddo (Potter)	1938		26	26	69	3	27,794	278,612												
Marion Co. (Shallow)	1939	3	34	37	179	5	65,825	305,006												
Nacogdoches:																				
Nacogdoches	1898		38	38	5		2,744	450,347												
Navarro:																				
Bazette	1939									1						1				
Corsicana	1896		608	608	385	⅗	139,988	16,794,911	3[1]						1	4				
Currie	1921		14	14	106	8	37,834	6,912,293												
Hooser	1942									2						2				
Powell	1900		149	149	1,501	10	558,490	120,894,472												
Rice	1938							362												
Richland	1924		4	4	34	9	12,663	6,389,198												
Panola:																				
Carthage	1936									3						3				
Panola (Bethany)	1938		4	4	17	4	6,715	64,605												
Tacoma	1934							20,220												
Robertson:																			1	1
Rusk:																				
New Salem															2	2				
Pleasant Grove	1941	4	3	7	199	28	60,552	78,657	4						2	6				
Pleasant Grove (Shallow)			1	1	20	20	10,929	10,929												
Unclassified									1							1				

†Data for October.

Eastern Texas (Outside East Texas Field)—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
					†Daily at End of 1942															
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Shelby:																				
Joaquin-Logansport	1931								1	1						2				
Pickering	1941				6		1,063	1,860												
Shelbyville	1917	1	1	2	3	2	1,550	8,566												
Smith:																				
Chapel Hill	1940	36	2	38	1,782	47	471,650	685,582	26	1	1					28				
Van														1		1				
Titus:																				
Talco	1936	16	729	745	26,329	35	9,530,202	56,665,114				1			1	2				
Upshur:																				
Unclassified																			1	1
Van Zandt:																				
Van	1929	335	228	563	9,883	18	3,383,700	132,600,241												
Van (Shallow)			29	29	59	2	20,854	98,100												
Unclassified																			1	1
Wood:																				
Coke	1942	20		20	632	32	94,455	94,455	27						2	29				
Hawkins	1940	350	11	361	21,164	59	5,439,206	6,912,370	135						18	153				
Quitman	1942								1							1				
Unclassified																			1	1
Total Eastern Texas outside E. Texas Field		1,217	2,712	3,929	83,346	21	31,480,153	624,134,660	231	15	7	2		2	44	301		1	4	5

[1] Includes Beulah. [2] Abandoned in 1940. † Data for October, 1942.

North Texas

Archer:																				
Anarene							*	*14,526,927												
Ada Anderson	1942								3						3	6				
Caddo	1941	9	12	21	390	19	172,097	307,958												
Canyon	1939						*	*147,957												
Chalk Hill	1931						*	*3,307,415												
Cooper	1942	1		1	39	39	4,904	4,904	1						1	2				
Ebnother	1942								4							4				
Griffin-Kadane									2						1	3				
Hull Silk	1938	191	230	421	10,754	26	3,829,666	11,039,027	4							4	3			3
Ikard								3,000												
Kolp									1						2	3				
Mankins	1939	9	5	14	614	44	188,425	498,119												
Scholl	1942								1							1				
Scotland	1940	18	1	19	751	40	215,725	282,810	9						1	10				
Stafford	1942								8							8				
Votsberger	1940	3		3	123	41	36,721	79,864												
[1]Unclassified	1911	7	3,351	3,358	7,764	2	2,959,625	108,120,019	14			6	9		31	60				
Baylor:																				
Cowan															1	1				
Maybelle	1941						*	*106,396												
Rendham	1940	1	13	14	221	16	84,949	139,996	2							2				
Rendham, East	1942								2							2				
Seymour	1939		32	32	1,012	3	364,159	781,674							1	1				
Unclassified	1925	1	126	127	1,404	11	154,380	4,972,730												
Clay:																				
Akin									1							1				
Antelope	1940	49	2	51	1,489	29	430,136	711,272	6							6				
Barry (Wright Barry)	1926						*	*81,116												
Burns-Browning	1939		3	3	72	24	29,378	165,777	1							1				
Burns-Wynn									1							1	1			1
East Blue Grove	1941						*	*9,548												
Fortex	1942								2						1	3				
Halsell	1939	4	7	11	388	35	146,886	348,678	2						1	3				
Hapgood (Norwood)	1940	3		3	183	61	55,020	125,674							1	1				
Joy	1941	5		5	336	67	107,996	109,981	2						2	4				
Kinder	1939		1	1	5	5	2,032	9,572												
Nebtex															1	1				
New York City	1941	8	1	9	350	39	121,742	148,178	5						2	7				
Petrolia	1902						*	*6,690,993												
Ross	1939	18		18	468	26	146,501	228,268	9							9				
Spring									1						3	4				
Watson	1942	3		3	88	29	25,379	25,379	7							7				
Worsham	1923		2	2	66	33	15,358	455,316												
Worsham-Ellenberger	1941							7,101												
Unclassified	1902		894	894	3,072	3	1,230,550	3,786,407	35					1	41	77			3	3
Cooke:																				
Ball Ranch								1,000												
Bindel	1941	2	4	6	93	16	30,356	46,793	1							1				
Field-Bowers							*	*660,756												
Gainesville (Anderson)	1935						*	*3,565,053												
Hoosier							*	*8,015,511												
Jacobs							*	*149,039												
Lawson-Bugg								14,000												
Meadors	1934						*	*29,937												
Muenster							*	*1,672,591												
[3]North Muenster							*	*5,055,075												
Trubenbach							*	*137,698												
Voth	1939		46	46	471	10	169,259	706,465												
Walnut Bend (Best)	1938	3	126	129	3,914	30	1,234,069	3,881,860	8							8				
Wheelock							*	*75,626												
Cooke:																				
Wilson	1941		7	7	78	11	27,280	31,326	2							2				
Unclassified	1926		1,001	1,001	3,607	4	1,384,770	1,942,967	9						11	20	3		1	4
Denton:																				
Bolivar	1937		1	1	3	3	1,548	15,610												
Foard:																				
Allee	1940						143	19,811												
Johnson	1932	1	10	11	178	16	73,223	1,687,145												
Thalia	1926						*	*336,364												
Unclassified	1929		5	5	34	7	11,659	1,681,542												

† Data for October, 1942.

[1] Includes Blewitt, Dundee, McCrory and S. Scotland fields. [3] Includes Danglemeyer and Havercamp.

* Production for 1942 included with "Unclassified" fields of county.

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North Texas—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					†Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Grayson:																				
Collinsville	1938	1	1	2	8	4	4,433	37,118												
Grayson	1942		4	4	56	14	17,593	17,593	1							1				
Pottsboro	1928		2	2	3	2	915	8,027												
Unclassified	1937							54,108												
Jack:																				
Antelope							*	*604,648												
Antelope:																				
Mississippian Lime	1941	2		2	106	53	25,710	32,103												
Birdwell (Nelson)	1939	2		2	45	23	16,920	72,800												
Bryson	1915						*	*16,455,929	1							1				
Bryson, East	1940	45	113	158	2,469	16	930,172	2,544,027												
Buttram							*	*1,450,465												
Buttram-Boyd								10,000												
Hoefle	1941	8	3	11	453	41	122,957	127,539	11						1	12				
Myers			4	4	77	19	20,173	20,173												
North Jermyn	1939						*	*13,048												
Perrin	1942								1							1				
Taubert-McKee	1942		1	1	24	24	1,500	1,500	1							1				
Worsham-Steed	1942		2	2	66	33	15,358	15,358	2							2				
Webb		1		1	1	1	1,164	1,164												
Unclassified	1915	12	576	588	2,259	4	870,386	912,927	5						11	16				
Montague:																				
Benson	1941	3	1	4	70	18	30,322	39,767												
[2]Benton-Holmes (Bowers)	1939	14	17	31	943	30	338,668	726,174	5						7	12				
Bonita	1939	15	5	20	722	36	234,982	622,282												
Chapman-McFarlin	1941		1	1	52	52	21,080	23,546							1	1				
Clinging-Smith	1941	1	3	4	162	41	67,485	88,503	3						1	4				
Davenport	1933						*	*1,997,784	1						1	2				
Eanes	1942								1							1				
Forestburg	1942	4		4	588	147	101,362	101,362	7						1	8				
Hildreth	1942								1							1				
Holt	1937						*	*721,358												
Hott	1933						*	*984,441												
Hults-Owens	1940	2		2	108	54	47,327	84,871	1							1			1	1
Illinois Bend	1942								1							1				
Ketchum	1942								1							1				
King	1942								1							1				
Mueller	1942	2		2	117	59	28,501	28,501	2							2				
Nocona	1925						*	*29,642,891												
Ringgold	1940	12	3	15	782	52	231,160	431,523	4						2	6	2			2
Rodgers & Rodgers	1939	27	20	47	1,164	25	435,132	1,648,368	1							1				
Roxy															2	2				
Sanders	1942	3	1	4	695	174	104,186	104,186	4						1	5				
Stoneburg			2	2	63	32	15,846	15,846	1						1	2				
Thomas	1941							1,068												
Turner	1941	1		1	29	29	8,146	11,262							2	2				
Unclassified	1924	3	952	955	4,031	4	1,499,477	1,500,312									2			2
Throckmorton:																				
Brockman	1942								1							1				
McKnight	1941	1	1	2	48	24	16,384	28,787												
Parrott	1941	1		1	21	21	8,141	9,426												
Woodson (Deep)	1924						*	*1,905,029												
Woodson (Shallow)	1926						*	*780,460												
Unclassified	1924	3	245	248	594	2	246,608	1,126,492	16				2		17	35			1	1
Unclassified, New Fields	1942								3							3				
Wichita:																				
[4]Burkburnett	1912						*	*156,101,991												
Electra	1911						*	*142,431,677												
Electra: Ellenburger Lime	1941	1	1	2	26	13	10,442	16,606												
K-M-A (Deep)	1913	1,024	579	1,603	24,165	15	9,084,143	68,862,904	24						3	27	7			7
K-M-A (Shallow)																				
Wichita:																				
K-M-A Ellenburger	1940	139	22	161	7,952	49	2,167,787	2,781,187	55						2	57	4			4
Kadane	1940	14	5	19	586	31	182,831	355,531												
Kadane (Shallow)	1941		5	5	69	14	36,166	40,423												
Potts															1	1				
Wichita Falls	1938							43,015	27			6			42	75				
Unclassified	1910	3	5,572	5,575	11,410	2	4,413,490	4,413,490	3							3			1	1
Wilbarger:																				
Barnes							*	*238,433												
Castlebury	1937						*	* 453,074												
Consolidated	1939	16	19	35	744	21	282,288	60,102,341	2						2	4	1		1	2
Fargo	1940	8	38	46	2,183	47	692,802	1,046,148	1							1				
Fluhman	1926						*	*893,547												
Harrold	1941	3	6	9	226	25	80,901	110,903	5						1	6				
King	1939		7	7	22	3	9,539	63,254												
Potts	1942		3	3	45	15	21,201	21,201	1						1	2				
Rock Crossing	1941	1	21	32	523	16	179,764	209,362												
Rock Crossing: Ellenberger	1941	4	2	6	187	31	54,339	57,294	4						1	5				
Sigler	1920							348,000												
South Vernon	1937							9,884,971												
Zenith	1930							358,254												
Unclassified	1912	9	1,543	1,552	5,844	4	2,207,615	3,425,516	5				3			8				
Unclassified, New Fields	1942								1							1				
Wise:																				
Park Springs	1942								1							1				
Young:																				
Anzac Graham	1941		4	4	85	21	30,977	45,085												
Blount	1941		1	1	8	8	3,933	8,874												
Briar Creek	1941	7		7	167	24	52,355	70,090												
Bullock	1942								1							1				
Bunger							*	*3,958,549												
Burns-Larimore	1941	1	3	4	67	17	26,095	43,045												
Burns-Ragland	1941	3		3	102	34	14,812	15,371	4							4				
Caddo (N. Knox)	1941	16	3	19	432	23	132,474	191,234												
Daws	1942		1	1	20	20	1,254	1,254	1							1				
Garvey			1	1	42	42	11,897	11,897												
Graham							*	*1,768,550												
Graham Vic								802,074												
Grigsby	1941							10,050												

† Data for October, 1942.
[2] Formerly included with Bonita.
[4] Includes Canyon.
* Production for 1942 included with "Unclassified" fields of county.

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North Texas—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
					†Daily at End of 1942															
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Herron City							*	*1,613,360												
Holbert	1942								1											
James	1940	20	31	51	458	9	174,951	2,824,700								1				
Kerlyn Loving	1941		3	3	38	13	15,958	26,855												
Killian	1942								1						1	2				
Kisinger							*	*2,785,647	1							1				
Knight	1938	18	13	31	584	19	253,044	636,173												
Knox	1939	16	10	26	277	11	108,450	543,496	1						1	2				
Knox, West	1942								1							1				
Loving-Deep	1939						*	*4,289												
Lupton & McLester	1941	19	2	21	225	11	85,974	156,675												
Martin	1937						*	*46,206												
Murray	1942								1							1				
Nunhall	1938						*	*31,459												
Padgitt	1942	3		3	275	92	25,952	25,952	4						2	6				
Ragland									2							2				
Rathke							*	*1,962,381												
Sewell	1938	35	4	39	732	19	246,846	728,957												
South Bend							*	*10,620,272												
Southwest Graham	1938						*	*197,644												
Steele	1942								1							1				
Stovall	1940						*	*19,229												
Talbot	1942								1						1	2				
Taylor (N. Loving)	1941	2		2	7	8	4,267	7,387												
Williamson	1941		4	4	166	42	55,167	77,676												
Unclassified	1917	56	2,169	2,225	6,137	3	2,356,342	49,950,664	28	4	1	2	10		25	70	6	1	7	14
Unclassified, New Fields	1942									1						1				
Total, North Texas		1,927	17,909	19,836	117,527	6	41,760,080	783,196,563	396	5	1	14	24	1	235	676	29	1	15	45

West Central Texas

Brown:																				
Bull-Acorn	1928						*	*134,736												
Byler	1927						*	*857,802												
Byrd Store	1921						*	*403,052												
Childress	1928						*	*883,497												
Clark-Buffalo	1928						*	*799,034												
Crosscut	1922						*	*6,419,103												
Crownover	1942								2						4	6				
Fry	1926						*	*7,935,052												
George	1928						*	*863,955												
Owens	1938						*	*7,866												
Smith-Ellis	1927						*	*2,381,519												
Stover	1925						*	*7,424,712												
West Brownwood (Deep)	1941						3,225	6,319												
Unclassified	1902	3	833	836	1,279	2	488,969	3,211,672	6	7					6	19				
Unclassified, New Fields	1942								1	2						3				
Callahan:																				
Baum	1926						*	*928,643												
Burks	1941							186												
Cozart	1939						*	*36,416												
Hatchett	1928						*	*1,449,672												
Isenhour	1923						*	*2,267,763												
Moutray	1926						*	*2,627,227												
Oplin (Odin)	1938						*	*6,803												
Prichard	1942								1							1				
Scranton	1939		8	8	65	8	20,163	85,364												
Unclassified	1923	1	1,151	1,152	709	½	280,952	7,964,292	4			1			3	8			1	1
Coleman:																				
Anzac Morris	1939	5	5	10	97	10	40,247	133,523												
Burkett (Deep)	1930						*	*712,883												
Burkett (Shallow)	1926						*	*2,473,152												
Coker	1941	6		6	560	93	73,673	73,673	6							6				
Dibbrell	1928						*	*500,912												
Eastland	1927						*	*2,106,006												
Featherston	1941							444												
Gayle	1940	4		4	41	10	14,235	35,754												
Goldsboro	1926	7	3	10	134	13	48,024	199,712												
Jennings	1938						*	*497,100												
Jim Ned	1941	3		3	22	7	13,257	16,756	1	2						3				
Norris	1941							1,072												
Novice	1938	11	1	12	103	9	37,490	886,109												
Novice, North	1940	37		37	578	16	235,139													
Overall	1928	2	5	7	77	11	24,178	1,397,962												
Santa Anna	1923						*	*465,504												
Silver Valley	1941	11		11	273	25	95,291	119,815												
Stewartson	1931						*	*440,092												
Talpa	1942									1						1				
Unclassified	1902	5	297	302	591	2	218,623	2,413,519	13	2					11	26	2			2
Unclassified, New Fields	1942								1	1						2				
Comanche:																				
Amity	1939		58	58	184	3	69,167	230,343												
Duster	1938						*	*5,624												
Sipe Springs	1926						*	*1,684,892												
Smith-Morgan	1942		2	2	19	10	6,788	6,788	2							2				
Unclassified	1918	6	51	57	56	1	19,789	65,592	3						6	9			1	1
Concho:																				
Ruth	1940						*	*1,026												
Eastland:																				
Carbon	1939	1	7	8	31	4	14,222	76,092												
Desdemona	1919						*	*23,509,350												
Hilburn	1920						*	*1,131,585												
Maogum	1926						*	983,759												

† Data for October, 1942.
* Production for 1942 included with "Unclassified" fields of county.

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West Central Texas—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					†Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Eastland—Continued:																				
Farmer	1937						*	*93,476												
Pioneer	1920						*	*5,610,626												
Ramsower	1926						*	*1,534,801												
Southwest Cisco	1940						*	*3,056												
Unclassified	1918	30	394	424	2,162	7	774,082	66,631,515	2	1					1	4	2			2
Erath:																				
Unclassified	1918	2	13	15	62	4	26,229	713,377												
Fisher:																				
Bennett (S. W. Rotan)	1941		2	2	18	9	7,262	67,424												
Howard	1934							195,179												
McCaulley	1941		7	7	93	13	46,370	70,039	2						2	4				
Rotan (Robinson)	1937		32	32	355	11	124,975	1,335,411												
Royston (Stephens)	1928		101	101	1,051	10	397,052	11,709,048	2							2				
Unclassified	1928							3,000												
Haskell:																				
Lawson			1	1	5	5	2,862	2,862							1	1				
Moody	1928						*	*118,343												
Pardue	1938						*	*59,789												
Unclassified	1938	1	8	9	32	4	16,155	29,533												
Jones:																				
Akard	1938	18	9	27	378	14	121,264	265,124												
Appling	1939		3	3	16	5	9,990	65,058												
Avoca	1937	44	11	55	604	11	320,367	2,102,494												
Avoca (Shallow)	1940							9,590												
Avoca, West	1941	1	1	▲2	49	25	12,348	18,323												
Barton	1938						*	*44,906												
Condor-Sales	1932						*	*2,626,946												
Griffin	1938	47	21	68	957	14	418,201	2,092,504												
Grogan	1942		1	1	30	30	3,309	3,309	1							1				
Guitar							*	*796,486												
Hawley (King)	1925		63	63	273	4	109,005	3,257,941												
Higgs	1926						*	*354,064												
Lewis-Steffens	1937	6	185	191	788	4	384,704	2,515,538												
Lueders	1935						*	*582,961												
Neas	1938						*	*3,026												
Noodle	1938						*	*307,514												
Noodle Creek	1926						*	*7,025,365												
Noodle, South	1941		5	5	124	25	38,439	68,632												
North Avoca	▲1940	6	2	8	193	24	63,414	112,332												
Prichard	1938						*	*11,082												
Radium (Chittendon)	1938						*	*27,763												
Reid (Penick)	1940		4	4	23	6	7,577	28,731												
Sayles	1933	22	57	79	777	10	294,103	2,381,022												
Sellars	1933						*	*32,206												
Simmons-Harvey	1937						*	*45,448												
Stith	1940	2	2	4	47	12	15,232	27,133												
Strand	1941	1	1	2	38	19	13,299	23,020												
Triplet	1940		5	5	53	11	26,682	68,039												
Tuxedo	1939						*	*81,383												
Wimberly	1941	39	2	41	563	14	174,457	196,606	1							1				
Wimberly, East	1941						*	*15,062												
Unclassified	1926	7	164	171	908	5	340,536	527,005	43						25	68	1			1
McCulloch:																				
Unclassified	1935							2,000												
Nolan:																				
Unclassified	1939						550	3,815							1	1				
Palo Pinto:																				
Dalton								335,000												
Hart	1934						*	*751,000												
House		1		1			4,332	4,332	1							1				
Strawn	1915							3,000,037												
Unclassified	1915	6	125	131	275	2	92,892	1,075,467	2	1					4	7		1		1
Parker:																				
Darneli	1942									1						1				
Shackelford:																				
Baker	1937						*	*13,533												
Bluff Creek	1930						*	*4,065,060												
Cook	1926						*	*17,191,136												
Davis	1935							50,000												
Elliott	1942	1		1	13	13	2,913	2,913	2						1	3				
Frye	1926						*	* 344,587												
Hope	1925						*	*1,428,840												
Ibex	1921						*	*2,465,002												
Ivy (Deep)	1937	35	47	82	615	8	309,152	1,858,764						1		1				
Ivy (Shallow)																				
Morris-Blue	1933						*	*777,000												
Nail	1927		17	17	264	16	83,621	537,091												
Newell	1924						*	*912,867												
Pet. Producers	1929						*	*171,057												
Poor Farm	1942								1							1				
Powers	1941							1,073												
Roark Nail	1942		1	1	19	19	1,722	1,722	2						1	3				
Simmons-Harvey	1926						*	*437,450												
South Dyer	1940						*	*7,548												
Tannehill-Matthews	1928						*	*2,475,430												
Unclassified	1914		1,915	1,915	3,916	2	1,482,024	11,682,367	19	3					13	35		1		1
Unclassified, New Fields	1942								3							3				
Stephens:																				
Corbett									1							1				
Curry	1921						*	*9,753,092												
Donnell			3	3	93	31	36,761	36,761	2							2				
Loving (Eolian)	1939	9	4	13	116	9	50,488	141,293												
North Cisco Lake	1939						*	*29,331												
Strawn	1915							4,723,866												
Stribling	1939		13	13	55	4	24,950	179,672												
Stroud	1939						*	*18,284												
Stroud, (Deep)	1939		1	1	18	18	7,091	9,812												
Unclassified	1916	16	567	583	2,818	5	1,009,247	115,235,869	6	3					2	11	2			2
Unclassified, New Fields	1942								1							1				

† Data for October, 1942. *Production for 1942 included with "Unclassified" fields of county.

West Central Texas—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942*			
		Flowing	Artificial Lift	Total	†Daily at End of 1942 Whole Field	†Daily at End of 1942 Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Stonewall:																				
Aspermont (Smith)	1940		2	2	27	14	10,341	32,221	1						1	2				
Boyd	1939		1	1	12	12	5,055	29,376												
Carlile (Swenson)	1938		2	2	35	18	17,273	102,623												
Taylor:																				
Bowles	1939		8	8	12	1½	6,202	107,598												
Lake Kirby	1940	1	4	5	8	2	2,796	7,761	1						1	2				
Merkel	1941	2	7	9	126	14	43,545	59,363	2						2	4	1			1
Reddin	1942	2		2	83	42	9,780	9,780	2						4	6				
Reddin-Frazier	1942		1	1	29	29	2,900	2,900	1						2	3				
South View	1940	8	5	13	176	14	68,571	159,414												
Trent	1942		2	2	23	12	11,444	11,444	2						2	4				
Unclassified	1929	2	11	13	101	8	33,828	436,785	4						4	8				
Total West Central Texas		411	6,251	6,662	23,252	3	8,768,914	381,431,152	144	24		1		1	97	267	8	2	2	12

West Texas

Andrews:																				
Deep Rock	1933	2	8	10	60	6	29,602	884,207												
Dodson	1941			?	5		995	1,419												
Embar	1942	4		4	867	217	119,402	119,402	7						4	11				
Embar, Permian	1942	4		4	55	16	1,706	1,706	1							1				
Fuhrman	1930	39	16	55	490	9	249,902	3,147,932	1							1				
Fuhrman, West	1941	2	6	8	68	9	40,108	45,899	9							9				
Fullerton	1942	8	1	9	304	34	112,971	112,971	12							12				
Holt	1938							19,595												
Mascho	1942		6	6	33	6	11,280	11,280	5							5				
Means	1934	70	52	122	1,446	12	706,287	6,043,174												
Melvin			1	1			5,219	5,219												
Midco	1942								1							1				
Parker	1935		2	2	25	13	9,713	89,619												
West Andrews	1940	11	11	22	226	10	50,646	73,568	16						2	18				
Unclassified																			1	1
Cochran:																				
Dean	1938	1	2	3	65	22	16,460	88,544	1							1				
Rhodes	1941		1	1	11	11	2,983	4,867												
Sunray-Wright	1942								1							1				
Wright	1939							7,250												
Unclassified									1							1				
Coke:																				
Blackwell	1942		1	1	16	16	3,663	3,663	1							1				
Crane:																				
Church-Fields	1926							66,448,384	3							3				
Crane-Cowden	1925		100	100	489	5	192,923	2,768,379												
Dune (North Church)	1938	11	15	26	241	9	112,090	563,252	3							3	1			1
Edwards	1935		4	1	7	7	3,162	20,348												
Ella Waddell	1940	1	4	5	71	14	27,961	51,185												
[1]Gulf-McElroy	1926								2							2	5			5
Gulf-Waddell	1934	74	10	84	1,143	14	491,106	4,124,201	11							11				
Hurdle	1936		12	12	55	5	16,944	242,013												
Jordan	1937	180	45	225	3,724	17	1,352,064	5,842,327	6							6				
[2]McCamey	1926	13	838	851	9,382	11	3,220,753	56,647,467	11							11	5			5
[3]McClintic	1939							790,511												
McKee	1942	1		1	81	81	8,542	8,542	1						1	2				
Sand Hills (Deep)	1936	28	2	30	1,197	40	432,539	839,258	3						1	4				
Sand Hills (Shallow)	1934	122	20	142	1,391	10	717,865	3,911,436	27	1						28	1			1
Sand Hills (South)	1941							29,089												
Webb-Ray	1935		2	2	12	6	3,922	60,076												
Crockett:																				
Bean	1941						294	4,109							1	1				
Clara Couch	1941	2	5	7	45	6	11,875	12,951	6	1					6	13				
Crockett (McCamey South)	1938	9	28	37	246	7	87,464	358,862	3							3				
Hoover	1941		2	2	8	4	5,037	6,876							3	3				
Live Oak	1941		1	1	4	4	1,199	2,811												
Noelke	1940	29	1	30	225	8	83,680	195,258												
Olson	1941		2	2	12	6	6,175	10,812												
Simpson	1938		1	1	3	3	1,115	5,843												
Soma-Noelke									5	4					2	11				
Sun-Shannon	1942								2							2				
Todd (Deep)	1940	14		14	183	13	71,234	204,211	1						2	3				
World	1925		75	75	1,760	23	606,596	7,867,190	14						3	17				
Wyatt	1934	1		1	18	18	5,206	37,939												
Dawson:																				
Albaugh									1							1				
Scanlan	1938							1,294												
Welch	1941		1	1	18	18	9,397	9,592												
Ector:																				
Addis-Odessa (S. Cowden)	1933	88	27	115	1,121	10	596,690	2,853,184												
Douro	1941							198												
Emma	1937	8	52	60	497	8	284,942	1,172,980	12							12				
Foster	1936	299	275	574	4,467	8	2,265,031	15,474,663	27						6	33			1	1
Goldsmith-Cummings	1935	895	52	947	15,115	16	6,487,051	39,208,498												
Goldsmith (North)	1940	2	8	10	83	8	33,797	97,877	19							19				
Harper	1933	23	161	184	1,281	7	624,732	7,944,800												
Johnson	1935	80	45	125	1,311	10	685,889	1,817,611												
Judkins (Penwell)	1926	81	92	173	1,618	9	866,746	23,312,627	1						1	2				
Midway	1942								1							1				
Moss	1938							1,361												
North Cowden (Shallow)	1930	439	96	535	5,902	11	2,985,852	24,094,931	35						4	39	1			1
North Cowden (Deep)	1930	3	2	5	86	17	27,702	118,388	5							5				
Unclassified									1							1				

† Data for October, 1942.
[1] See Upton County. [2] Formerly included with Crane-Cowden. [3] Production prior to 1939 included with Church-Fields.

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West Texas—Continued

COUNTY AND FIELD	Year Found	†OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	†Daily at End of 1942 Whole Field	†Daily at End of 1942 Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Gaines:																				
Cedar Lake	1939	1	49	50	896	18	318,295	574,660	21	...	...	...	...	...	1	22	...	...	...	...
Robertson	1942	...	...	...	...	...	2,635	2,635	1	...	...	...	...	...	...	1	...	...	...	...
Seminole	1937	288	4	292	1,001	3	1,429,290	5,355,090	11	...	...	...	...	...	...	11	1	...	...	1
Garza:																				
Garza (Post City)	1937	...	4	4	17	4	7,572	35,157	1	...	...	...	...	...	...	1	...	...	...	...
Justiceburg	1937	...	...	...	...	...	...	16,438	...	...	...	...	...	...	...	...	...	...	...	...
Swenson	1939	...	...	...	...	...	...	1,515	...	...	...	...	...	...	...	...	...	...	...	...
Glasscock:																				
Carter	1937	...	...	...	...	...	1,937	31,099	...	...	...	...	...	...	...	...	...	...	...	...
Hockley:																				
Slaughter	1937	1,120	60	1,180	23,511	20	7,472,009	13,928,838	417	...	...	...	...	...	5	422	3	...	...	3
Howard:																				
[4]Chalk	1926	...	822	822	13,150	16	4,812,835	104,831,550	24	...	...	...	...	...	1	25	3	...	...	3
Iatan-East Howard	1936	4	307	311	3,962	13	1,452,473	14,696,588	2	...	...	...	...	...	...	2	...	...	...	...
Moore	1937	...	7	7	47	7	16,647	94,905	...	...	...	...	...	...	...	...	...	...	...	...
Scott	1938	...	...	...	...	...	...	170,856	...	...	...	...	...	...	...	...	...	...	...	...
Snyder	1937	...	100	100	719	7	281,698	2,327,855	...	...	...	...	...	...	...	...	...	...	...	...
Irion:																				
Irion (Mertzon)	1929	...	2	2	...	...	2,002	154,844	...	...	...	...	...	...	...	...	...	...	...	...
Kimble:																				
Bolt	1940	1	1	2	3	2	1,109	2,361	...	...	...	...	...	...	...	...	...	...	...	...
Loving:																				
Mason	1937	5	4	9	168	19	59,658	500,500	...	...	...	...	...	...	...	...	...	...	...	...
Wheat	1926	37	49	86	882	10	345,233	9,058,426	...	...	...	...	...	...	1	1	1	...	...	1
Lubbock:																				
Lubbock	1941	...	1	1	1	1	3,973	5,168	...	...	...	...	...	...	...	...	...	...	...	...
Stennett	1942	...	...	...	...	...	986	986	1	...	...	...	...	...	...	1	...	...	...	...
Mitchell:																				
Northwest	...	...	...	...	...	...	...	...	14	...	...	...	...	...	...	14	...	...	...	...
Westbrook	1920	...	87	87	562	6	222,731	11,253,546	...	...	...	...	...	...	...	...	...	...	...	...
Unclassified	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	2	...	...	1	1
Pecos:																				
Abell	1940	72	3	75	2,187	29	735,075	932,282	46	2	...	...	...	...	6	54	2	...	...	2
Abell Permian	1941	15	5	20	215	11	78,728	93,335	...	...	...	...	...	...	...	...	...	...	...	...
Apco (Masterson Deep)	1939	19	1	20	421	21	109,407	268,004	10	...	...	...	...	...	1	11	...	...	...	...
Byrne	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...
Chancellor	...	2	...	2	73	37	15,741	15,741	2	...	...	...	...	...	1	3	...	...	...	...
Conry-Davis	...	...	...	...	...	...	...	...	4	...	...	...	...	...	4	8	1	...	...	1
Fromme	1940	7	4	11	55	5	23,537	95,721	2	...	...	...	...	...	3	5	...	...	...	...
Grassroots	1940	...	...	...	...	...	270	1,440	...	...	...	...	...	...	...	...	...	...	...	...
Heiner	1941	1	...	1	8	8	2,339	6,167	...	...	...	...	...	...	...	...	...	...	...	...
Jamison & Pollard	1941	1	...	1	79	79	27,299	48,499	...	...	...	...	...	...	...	...	...	...	...	...
Lehn	1939	29	21	50	161	3	100,803	393,452	2	...	...	...	...	...	1	3	...	...	...	...
Masterson (Shallow)	1929	...	24	24	131	5	48,052	992,301	...	...	...	...	...	...	...	...	...	...	...	...
Nettervile	1935	12	5	17	83	5	25,530	395,355	...	...	...	...	...	...	...	...	...	...	...	...
Payton	1938	23	100	123	942	8	330,009	2,870,957	...	...	...	...	...	...	...	...	...	...	...	...
Pecos Valley	1928	27	47	74	267	4	125,426	2,820,744	3	...	...	...	...	...	...	3	...	...	...	...
Pecos Valley (High Gravity)	1941	43	58	101	512	5	177,899													
Richards (Prior) (Pecos-Courtney)	1930	...	3	3	4	1	1,524	25,883	...	...	...	...	...	...	...	...	...	...	...	...
Rowan & Tong	1929	...	...	...	...	...	...	2,000	...	...	...	...	...	...	...	...	...	...	...	...
Shearer	1938	11	32	43	514	12	186,568	1,217,488	1	...	...	...	...	...	...	1	...	...	...	...
Taylor-Link	1929	7	114	121	1,595	13	617,018	7,821,794	9	...	...	...	...	...	4	13	2	...	...	2
Toborg	1930	19	234	253	1,316	6	484,021	7,454,321	3	...	...	...	...	...	2	5	...	...	...	...
Walker	1940	49	11	60	767	13	241,741	405,345	28	...	...	...	...	...	5	33	...	...	...	...
Wentz	1941	...	2	2	67	34	21,858	23,396	2	...	...	...	...	...	...	2	...	...	...	...
White-Baker	1935	18	...	18	237	13	83,805	255,941	2	1	...	...	...	...	...	4	...	...	...	...
Yates	1926	513	65	578	22,007	38	6,691,116	266,777,967	1	...	...	...	...	...	1	2	1	...	...	1
Unclassified	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	1	1
Reagan:																				
Barnhart	1941	9	...	9	403	45	100,339	114,711	10	...	...	...	...	...	...	10	...	...	...	...
Big Lake (Deep)	1928	6	193	199	4,778	24	1,896,802	100,177,154	1	...	...	...	...	...	...	1	...	...	2	2
Big Lake (Shallow)	1923	...	...	...	...	...	...	639,753	1	...	...	...	...	...	...	1	...	...	...	...
Skelly-Grayson	1929	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Reeves:																				
Anthony (Toyah)	1939	1	...	1	1	1	79	2,662	...	...	...	...	...	...	...	...	...	...	...	...
Runnels:																				
Beddo	1938	...	6	6	139	23	47,678	96,472	2	...	...	...	...	...	1	3	1	...	...	1
Huddleston	1940	1	...	1	6	6	4,838	15,818	...	...	...	...	...	...	...	...	1	...	...	1
Ladd (Ballinger)	1927	...	...	...	...	...	...	982,817	...	...	...	...	...	...	...	...	...	...	...	...
McMillan	...	...	2	2	6	3	3,970	3,970	...	...	...	...	...	...	...	...	...	...	...	...
Schleicher:																				
Opp (El Dorado)	1939	...	...	...	...	...	...	2,595	...	...	...	...	...	...	...	...	...	...	...	...
Page	1937	1	...	1	25	25	8,097	40,655	...	1	...	...	...	...	...	1	...	...	...	...
Unclassified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scurry:																				
Sharon Ridge (Ira)	1924	1	172	173	1,112	6	423,507	1,356,545	3	...	...	...	...	...	2	5	...	...	...	...
Tom Green:																				
Funk	1940	...	1	1	2	2	501	861	...	...	...	...	...	...	...	...	...	...	...	...
Upton:																				
Gulf-McElroy	1926	108	487	595	15,149	25	4,885,219	55,589,800	16	...	...	...	...	...	...	16	...	...	...	...
Herrington	1938	...	2	2	27	14	9,972	60,342	...	...	...	...	...	...	...	...	...	...	...	...
Ward:																				
Byrd	1942	3	...	3	14	5	5,240	5,240	4	...	...	...	...	...	1	5	...	...	...	...
Dobbs	1936	...	1	1	6	6	2,108	20,053	...	...	...	...	...	...	...	...	...	...	...	...
Estes	1934	214	128	342	3,519	10	1,461,930	13,991,025	1	...	...	...	...	...	...	1	...	...	...	...
Magnolia-Sealy	1939	3	50	53	612	12	228,363	911,944	...	...	...	...	...	...	1	1	...	...	...	...
Magnolia-Sealy (South)	1940	17	...	17	571	34	165,597	253,972	2	...	...	...	...	...	...	2	...	...	...	...
Monahans	1942	1	...	1	313	313	25,586	25,586	1	...	...	...	...	...	...	1	...	...	...	...
Monahans, Permian	1942	1	...	1	19	19	1,603	1,603	1	...	...	...	...	...	...	1	...	...	...	...
Monroe	1931	1	...	1	18	18	6,494	62,800	...	...	...	...	...	...	...	...	...	...	...	...
Nichols	1942	...	1	1	16	16	1,275	1,275	1	...	...	...	...	...	...	1	...	...	...	...
Pruitt	1942	...	1	1	9	9	1,719	1,719	1	...	...	...	...	...	...	1	...	...	...	...
Pyote	...	2	...	2	95	48	22,406	22,406	2	...	...	...	...	...	2	4	...	...	...	...
Shipley	1928	10	115	125	1,276	10	445,997	4,166,511	...	...	...	...	...	...	...	...	...	...	...	...
Shipley (Silurian)	1940	2	...	2	5	3	12,407	37,711	...	...	...	...	...	...	...	...	...	...	...	...
Spencer	1941	8	1	9	151	17	45,678	55,097	4	...	...	...	...	...	1	5	...	...	...	...
Ward, North	1940	257	166	423	4,721	11	2,019,521	24,488,172	22	1	...	...	...	...	2	25	9	...	...	9
Ward, South	1928	119	456	575	2,696	5	986,324	28,554,971												

† Data for October, 1942. [4] Also known as Howard-Glasscock.

West Texas—Continued

COUNTY AND FIELD	Year Found	[1]OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	[1]Daily at End of 1942 Whole Field	[1]Daily at End of 1942 Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Winkler:																				
Eaves	1936	2	5	7	475	68	155,297	696,413	....											
Emperor	1935	72	8	80	1,021	13	376,400	2,945,965	11	1						12				
Emperor (Deep)	1940	26	13	39	289	7	119,218	403,199	....											
Halley (Skelly-Halley)	1934	3	22	25	206	8	83,247	943,709	....						..					
Henderson	1936	122	15	137	4,442	32	1,126,301	6,324,146	2							2				
Hendrick	1926	62	241	303	6,683	22	2,538,354	207,884,081	3						1	4				
[5]Kermit	1934	171	649	820	3,324	4	1,719,412	31,034,051												
Keystone (Colby)	1935	204	55	259	3,440	13	1,248,985	4,238,639	48							48	2			2
Keystone Lime	1935	80	24	104	1,159	11	453,867	4,842,933	....											
Leck	1934	1	8	9	372	41	155,859	3,900,614	....											
Scarborough	1934	88	46	134	1,295	10	460,266	5,451,438	2							2				
Weiner	1941	18	.....	18	225	13	81,386	82,836	19	1						20				
Unclassified	....	.....	.....	.....	.....	.....	.....	.....	2							2				
Yoakum:																				
Ownby	1941	6	.....	6	121	20	45,860	71,275	....											
Waples-Platter	1939	4	1	5	75	15	21,631	63,755	4							4				
[6]Wasson	1937	1,305	67	1,372	21,975	16	9,536,340	40,871,343	93							93				
West	1938	.....	1	1	13	13	8,326	42,567	....											
Total West Texas	....	7,797	7,245	15,042	212,831	14	81,191,360	1,275,264,503	1,122	13	....	....	....	....	85	1,220	40	....	7	47

[5] Also known as Brown-Altman, Keyes, and Sayre. [6] Includes West Whittenberg and Bennett.

Texas Panhandle

Carson	....	8	702	710	11,627	16	4,069,329	42,770,179	35	10	....	....	....	....	3	48	2	....	....	2
Gray	....	18	2,373	2,391	38,790	16	13,649,530	199,972,852	98	11	....	....	....	....	6	115	1	....	....	1
Hutchinson	....	10	2,004	2,014	30,812	15	11,472,599	168,384,846	133	5	....	....	....	....	2	140	2	....	....	2
Lipscomb	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	.....	.....	....	....	1	1
Moore	....	5	10	15	404	27	162,995	5,431,473	1	31	....	....	....	....	.....	32	....	....	....	....
Osborne	....	1	51	52	687	13	248,307	248,307	....	....	....	....	....	....	.....	.....	....	....	....	....
Potter	....	.....	.....	.....	.....	.....	.....	42,000	....	2	....	....	....	....	2	4	....	....	....	....
Sherman	....	.....	.....	.....	.....	.....	.....	.....	....	1	....	....	....	....	1	2	....	....	....	....
Wheeler	....	1	360	361	3,370	9	1,265,497	23,665,979	10	3	....	....	....	....	3	16	1	....	....	1
Total Texas Panhandle	....	43	5,500	5,543	85,690	15	30,868,257	440,425,636	277	63	....	....	....	....	17	357	6	....	1	7

Upper Texas Gulf Coast

Austin:																				
Orange Hill	1942	.....	.....	.....	.....	.....	.....	.....	1	....	....	....	....	..	.....	1	....	....	....	....
Raccoon Bend (Deep)	1934	65	19	84	3,781	45	1,148,550	7,004,397	....	....	....	....	....	....	.....	.....	....	....	....	....
Raccoon Bend (Shallow)	1927	1	75	76	1,350	18	438,960	18,658,876	....	....	....	....	....	....	.....	.....	....	....	....	....
Sealy	1942	.....	.....	.....	.....	.....	.....	.....	1	....	....	....	....	....	.....	1	....	....	....	....
Unclassified	....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	1	1	....	....	....	....
Brazoria:																				
Allen	1927	.....	.....	.....	.....	.....	.....	90,832	....	....	....	....	....	....	.....	.....	....	....	....	....
Angleton (Anchor)	1939	2	.....	2	3	2	75,441	567,206	....	....	....	....	....	....	.....	.....	....	....	....	....
Bailey's Prairie	1940	.....	.....	.....	.....	.....	.....	200	1	....	....	....	....	....	.....	1	....	....	....	....
Chenango	1941	1	.....	1	58	58	21,533	57,765	....	....	1	....	....	....	.....	1	....	....	....	....
Chocolate Bayou	1939	2	.....	2	211	106	112,495	272,813	2	....	....	....	....	....	1	3	....	....	....	....
Clemens Dome	....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	1	1	....	....	....	....
Damon Mound	1915	.....	27	27	203	8	76,446	9,537,566	....	..	....	....	....	....	.....	.....	....	....	....	....
Danbury	1934	5	11	16	674	42	220,627	767,864	3	....	....	....	....	....	3	6	....	....	....	....
Hastings	1934	667	16	683	40,318	59	10,431,616	45,704,215	..	....	....	....	....	....	.....	.....	....	....	....	....
Hoskins Mound	1905	.....	.....	.....	.....	.....	.....	104,739	....	....	..	..	....	....	.....	.....	....	....	....	....
Lochridge	1937	32	10	42	1,901	45	664,083	3,891,139	....	..	....	....	....	....	.....	.....	....	....	....	....
Manvel	1931	103	71	174	6,187	36	1,910,144	23,255,463	..	....	....	....	....	....	1	1	....	....	....	....
Old Ocean	1934	108	1	109	6,973	64	3,728,036	18,393,876	8	....	....	....	....	....	.....	8	....	....	....	....
Pledger	1932	.....	.....	.....	.....	.....	.....	17,000	....	1	....	....	....	....	.....	1	....	....	....	....
Rowan	1940	7	.....	7	248	35	104,370	290,837	....	....	....	....	....	....	.....	.....	....	....	....	....
Sandy Point	1937	.....	3	3	123	41	35,006	313,069	....	....	....	....	....	....	.....	.....	....	....	....	....
Stratton Ridge	1922	.....	.....	.....	.....	.....	.....	33,845	....	....	....	....	....	....	.....	.....	....	....	....	....
West Columbia (Old)	1919	18	27	45	1,911	40	754,718	82,977,012	4	..	....	....	....	....	1	5	....	....	....	....
West Columbia (New)	1939	94	9	103	5,474	53	1,235,275	6,527,811	....	..	....	....	....	....	.....	.....	....	....	....	....
Chambers:																				
Anahuac	1935	359	.....	359	7,927	22	3,587,642	23,669,051	2	....	....	....	....	....	1	3	....	....	....	....
Barbers Hill	1916	23	121	144	7,188	50	2,861,740	76,866,216	3	.	....	....	....	....	.....	3	....	....	....	....
Cedar Bayou	1938	1	.....	1	12	12	5,213	22,610	....	....	....	....	....	....	.....	.....	....	....	....	....
Cedar Point	1938	16	.....	16	463	29	190,126	1,261,692	....	....	....	....	....	....	.....	.....	....	....	....	....
Cotton Lake	1936	2	6	8	218	27	81,487	842,931	....	....	....	....	....	....	.....	.....	....	....	....	....
Cotton Lake, South	1936	23	20	43	1,546	36	570,043	2,790,699	....	....	....	....	....	....	.....	.....	....	....	....	....
Fig Ridge	1940	24	.....	24	603	25	225,318	278,109	18	....	....	....	....	....	.....	18	....	....	....	....
Fisher's Reef	1940	2	.....	2	72	36	29,128	58,220	....	....	....	....	....	....	.....	.....	....	....	....	....
Lost Lake	1929	.....	8	8	40	5	12,247	1,043,499	....	....	....	....	....	....	.....	.....	....	....	....	....
Oyster Bayou	1941	12	.....	12	367	31	131,434	173,475	6	....	....	....	....	....	1	7	....	....	....	....
Red Fish Reef	1940	15	.....	15	625	42	251,407	434,960	3	....	....	....	....	....	.....	3	....	....	....	....
Seabreeze	1935	11	.....	11	348	32	110,033	503,165	2	....	....	....	....	....	.....	2	....	....	....	....
Turtle Bay	1935	27	7	34	1,200	35	480,422	2,486,522	....	....	....	....	....	....	.....	.....	....	....	....	....
Turtle Bay (Lotz Sand)	1935	3	.....	3	49	16	13,959													
Willow Slough	1937	7	.....	7	129	18	66,790	447,727	1	....	....	....	....	....	.....	1	....	....	....	....
Colorado:																				
Garwood	1933	.....	.....	.....	.....	.....	.....	6,198	....	....	....	....	....	....	.....	.....	....	....	....	....
Garwood, West	1941	3	.....	3	54	18	40,220	84,662	....	....	....	....	....	....	.....	.....	....	....	....	....
Sheridan	1940	3	.....	3	132	44	41,997	121,456	1	....	....	....	....	....	.....	1	....	....	....	....
Fort Bend:																				
Big Creek	1922	.....	17	17	308	18	103,228	10,140,306	1	....	....	....	....	....	.....	1	....	....	....	....
Blue Ridge	1919	7	38	45	664	15	300,647	11,358,327	3	....	....	....	....	....	2	5	....	....	....	....
Clodine	1941	12	.....	12	559	47	176,650	213,099	6	....	....	..	....	....	1	7	....	....	....	....

[1] Data for October, 1942

Continued on next page

Upper Texas Gulf Coast—Continued

COUNTY AND FIELD	Year Found	*OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					*Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Nash	1926						500	1,725,359							1	1				
Needville		3		3	98	33	39,587	39,587	2						1	3				
Orchard	1926	3	6	9	86	10	41,294	3,665,436												
Rosenberg	1939							19,234												
Sugarland	1928	34	18	52	1,999	38	617,384	31,328,932												
Thompson (Deep)	1931	172	31	203	12,493	62	3,409,905	42,750,964												
Thompson (Shallow)	1931	26		26	1,292	50	261,360	1,045,027												
Thompson South (4300' Miocene)	1939	80	2	82	4,195	51	1,279,171	3,357,581												
(5400' Sand)	1939																			
Thompson (Vicksburg)	1939	38		38	146	4	439,653	1,758,319	1							1				
Galveston:																				
Alta Loma	1940	5		5	223	45	75,271	487,584	2						1	3				
Caplen	1939	15		15	561	37	187,959	507,019	1							1				
Dickinson	1934	56	23	79	2,657	34	600,149	7,374,857												
Gillock	1934	74	18	92	3,572	39	1,171,950	7,672,812			1					1				
Gillock, S. E.									1	1						2				
Green Lake	1936	1		1	36	36	15,479	102,098												
High Island	1922	16	40	56	2,348	42	877,984	18,993,432												
Hitchcock	1937	10	4	14	433	31	152,111	1,050,129												
League City	1938	28	3	31	1,666	54	572,223	2,302,326												
Hardin:																				
Ariola	1932		12	12	260	22	94,796	2,327,775												
Batson (Deep)	1934	1	7	8	273	34	106,554	2,289,500							2	2				
Batson (Shallow)	1903		154	154	381	2	148,190	39,469,373												
Hampton	1941	1		1	35	35	14,469	14,469							1	1				
Saratoga	1902		221	221	715	3	272,438	29,960,146	2						2	4				
Silsbee	1936	29	13	42	1,763	42	690,809	3,333,425												
Silsbee, West	1941	2		2	71	36	24,089	47,769												
Sour Lake	1901	10	146	156	958	6	320,696	80,239,212	3						3	6				
Unclassified									1							1				
Harris:																				
Aldine	1939	1		1	53	53	14,902	60,708												
Aldine, West							1,136													
Aldine, North	1942								1						1	2				
Alief	1942										1				2	3				
Bammell	1937	1		1	110	110	40,059	523,618												
Clear Lake	1938	40	1	41	1,978	48	619,528	1,742,729												
Clinton (Green's Bayou)	1937	5	2	7	115	16	42,673	309,505							1	1				
Dyersdale	1940	40	6	46	1,541	34	421,955	782,449	6	1					1	8				
Eureka Heights	1935	10	15	25	1,263	51	428,348	3,167,477												
Eureka Heights (Deep)	1935	1		1	66	66	2,102	35,872												
Fairbanks	1938	278	14	292	7,016	30	2,645,881	11,133,353												
Friendswood (Webster)	1937	209	2	211	11,001	52	3,619,963	12,619,189												
Goose Creek	1908		83	83	1,219	15	489,089	77,790,474	2							2				
Hockley	1923							23,511												
Humble	1904	17	221	238	2,526	11	840,045	125,056,769	5						1	6				
Joyce Richardson (Ogburn)	1940	2		2	88	44	33,906	76,658					1			1				
Mykawa	1929		9	9	70	8	32,846	962,291												
Mykawa, New	1929	1	19	20	417	21	158,109	3,666,559												
North Houston	1938	4		4	126	32	46,534	192,167		1					1	2				
Pierce Junction	1921	11	54	65	1,546	24	570,094	36,049,013	4						1	5				
Rosslyn	1938	1		1	50	50	2,896	39,917												
Sateuma	1936	3	5	8	226	28	85,073	655,141	1							1				
South Houston	1935	68	22	90	2,184	24	668,225	7,430,068												
Tomball	1933	318	138	456	8,445	19	3,114,943	22,863,553	1							1				
Jasper:																				
Rockland	1928						2,693	42,315												
Jefferson:																				
Amelia	1936	105		105	4,097	39	1,380,083	7,107,538												
Big Hill	1923							14,000			1					1				
Cheek, North	1937							68,979												
Clam Lake (McFaddin)	1937	10	2	12	335	28	110,944	421,857												
Fannett	1927	25	11	36	1,424	40	441,083	3,613,193	1						2	3				
LaBelle	1937	4		4	203	51	73,345	323,589							1	1				
Jefferson:																				
Lovell's Lake	1938	94		94	5,683	60	1,797,114	4,287,206	15						2	17				
Nome	1936	19	13	32	1,293	40	474,126	2,847,424												
Sabine Pass	1941						622	11,505												
South China	1939	14	1	15	255	17	115,573	417,578												
Spindletop	1901	7	134	141	1,224	9	419,082	128,405,556							1	1				
Stowell	1941	11		11	1,192	108	260,954	263,621	12						2	14				
West Beaumont	1936	25	34	59	2,094	35	726,600	4,584,981	5							5				
Liberty:																				
Cleveland	1933	2	6	8	223	28	83,307	1,405,960												
Esperson	1929	24	38	62	1,706	28	666,599	7,076,122	9	3					2	14				
Esperson Dome, South	1939	23		23	835	36	241,533	1,394,768												
Hankamer (Old)	1929	4	24	28	362	13	137,483	6,134,245												
Hankamer (New)	1929	4	4	8	208	26	59,197	269,354												
Hardin	1935	90	56	146	2,356	16	1,067,318	8,476,532												
Hull	1918	16	161	177	6,229	35	2,237,982	96,165,406	4							4				
Martha	1939	11	1	12	552	46	187,532	454,639							1	1				
Moss Bluff	1930							210,265												
North Dayton	1905		3	3	6	2	4,318	2,252,767												
South Liberty	1925	4	34	38	299	8	117,153	15,992,814												
Matagorda:																				
Armour (McCloskey)	1938	1	2	3	20	7	17,577	168,739												
Bay City (Van Vleck)	1934	52	1	53	506	10	594,314	5,258,677	1							1				
Bay City, North	1942	2		2	167	84	5,171	5,171	2							2				
Big Hill	1904							211,000												
Blessing	1940							22,918												
Buckeye	1932		3	3	39	13	18,076	831,256												
Buckeye, South	1942								1							1				
Buttermilk Slough	1939	1		1	30	30	926	10,491												
Collegeport									1	2						3				
Hamman	1936	7	16	23	1,362	59	525,425	3,592,185												
Hawkinsville	1936							2,000												
Lucky	1941	3		3	95	32	38,726	55,674	1						3	4				
Markham	1908	11	29	40	1,050	26	321,831	8,953,438	1						2	3				
Markham-No. Carlson Horison		2		2	43	22	7,591	7,591												

* Data for October, 1942.

Continued on page 172

CAMERON'S PRESSURE CONTROL EQUIPMENT AND "KNOW HOW" MAKES

Dual Completions

AS SAFE AND PRACTICAL AS REGULAR COMPLETIONS

Cameron Type "LD" Ram-type Tubing Control Heads and Type "M" Test-weld Casing Head on a dually completed well in the La Gloria field, South Texas

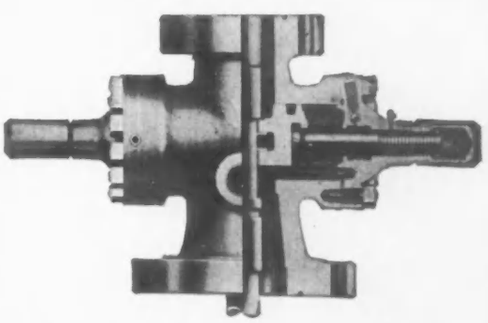
The Cameron Closed Pressure Method of Well Completion which has been employed successfully wherever well pressures present a menace to safe completions has also demonstrated its advantages in pressure maintenance projects where it is desirable to produce from two or more sands or to inject residue gas into two or more formations through a single well bore.

Throughout the entire dual completion operations—gun perforating, washing the well clean, collapsing the packer and suspending the tubing—the Cameron Ram-type Tubing Control Heads and auxiliary Cameron service units provide the ultimate in safe, dependable control.

The Cameron Type "G" Circulating Anchor Packer has been widely used in dually completed wells to assure a pressure tight seal between the producing zones. The unique feature of this rugged packer is the *self-feeding* packing element in the circulating by-pass which assures a pressure tight seal even though the seat may have been cut during washing operations.

The Lewis Transfer Valve, manufactured by Cameron under exclusive license from James O. Lewis, was designed especially for pressure maintenance service. It automatically prevents either of the zones from "loading up" with distillate.

To operators contemplating the need for either dual production or injection wells Cameron issues an invitation to make use of its engineering knowledge gained and equipment perfected through pioneering this method of well completion.



This cross-section view of the Cameron Type "LD" Ram-type Tubing Control Head clearly shows its unique mechanical features. Equipped with rams similar to those of the famous Cameron Blowout Preventer and with patented self-feeding ram packers, this head provides positive protection against loss of control during every stage of completion operations. Hanger nipple type suspension on the closed rams is illustrated, however several other types of suspension are also available.

CAMERON IRON WORKS, INC.

711 MILBY STREET HOUSTON, TEXAS

Export: 74 Trinity Place, New York, N. Y.
California: The Howard Supply Co., Los Angeles
Rocky Mountain: Mountain Sales and Service, Casper, Wyo.

CAMERON IRON WORKS OIL WELL SPECIALTIES

CAMERON-IZE FOR MAXIMUM SAFETY EVERY INCH OF THE WAY

Upper Texas Gulf Coast—Continued

COUNTY AND FIELD	Year Found	*OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					*Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Markham No. Cornelius Horizon		19		19	405	21	57,670	57,670												
North Markham	1938	1		1	3	3	119,499	394,273	3							3				
Palacios	1937	2		2	14	7	3,852	117,149												
Sheppards Mott	1936							2,425												
Wilson Creek	1932	1		1			8,867	91,419												
Unclassified										1						1				
Montgomery:																				
Conroe	1931	861	72	933	44,340	48	13,499,571	142,062,302	1						4	5				
Conroe, West	1941	1		1	27	27	8,028	14,344												
Fostoria			1	1	2	2	7,273	7,273							1	1				
Lake Creek	1941	2		2				43,861	8	1	1				1	11				
Magnolia	1941							1,479							1	1				
Splendora	1934							1,000												
Newton:																				
Call	1937							11,500												
Orange:																				
Bland	1941		2	2	27	14	11,810	20,289	1							1				
E. Goodrich															1	1				
Orange	1913		35	35	350	10	137,696	33,425,231												
West Orange	1937	19	23	42	1,338	32	544,446	2,662,223												
Port Neches	1929	3	12	15	402	27	108,911	5,536,018												
West Pt. Neches	1939	23	5	28	974	35	252,402	762,078	2						2	4				
Polk:																				
Ace: Deep (Schwab-Wilcox)	1934	4	1	5	192	38	62,973	330,137												
Ace: Shallow (Schwab)	1934							149,687												
Goodrich	1941	2	1	3	64	21	31,982	36,179	1						1	2				
Livingston	1932	3	71	74	1,494	20	546,603													
Livingston Sparta Sand		1		1	22	22	8,382	7,266,182	2							2				
Livingston Wilcox		1		1	64	64	12,865													
Segno (Deep)	1931	77	4	81	3,347	41	1,003,726	3,957,050	1							1				
Segno (Shallow)	1931	28	9	37	918	25	276,697	2,564,796												
San Jacinto:																				
Mercy	1942	7		7	603	86	159,324	159,324	10						1	11				
Shepherd	1940							14,804												
Tyler:																				
Camp Eleven	1942	2		2	107	54	73,906	73,906	2						1	3				
Fred	1941	2		2	112	56	30,725	50,701	1							1				
Joe's Lake	1937	41	1	42	1,836	44	736,214	3,219,838												
Ramer Island	1942								1						1	2				
Spurger	1937							51,620												
Waller:																				
Brookshire (San Felipe)	1934							21,882												
Katy	1938							213,708		6	2					8				
Washington:																				
Brenham	1915		6	6	7	1	2,505	333,622												
Clay Creek	1928	5	45	50	424	85	141,154	4,744,763												
Wharton:																				
Abel Borden (Mackey)	1940	1		1	13	13	6,663	44,494												
Boling	1925	18	36	54	836	15	345,345	7,959,062	7							7				
East Bernard	1940							1,160												
Hillje	1939	12	3	15	612	41	191,679	500,088	1							1				
Kubela	1935	9	10	19	605	32	211,500	1,159,084												
Lissie	1940							839	1							1				
Louise	1933	5	31	36	1,216	34	426,203	3,825,390												
Magnet-Withers	1936	376	20	396	15,007	38	4,195,632	14,025,781	70						3	73				
Pickett Ridge	1935	27	19	46	1,570	34	452,734	3,520,600												
Spanish Camp									1							1				
Unclassified															1	1				
Total Upper Texas Gulf Coast		5,393	2,755	8,148	279,039	34	91,340,474	1,489,107,420	265	17	7	...	1	...	66	356	...	...	...	...

Lower Texas Gulf Coast

Aransas:																				
La Mar	1937							1,095												
St. Charles	1941	1		1	6	6	8,232	24,961			1				1	2				
Bee:																				
Beeville (Church)	1935							1,000												
Cadiz	1942								1	1						2				
Caesar (Ruhman)	1934		16	16	60	4	28,222	1,070,676												
Dirks	1934	2	84	86	138	2	144,026	6,139,222												
Genevieve	1941							1,249												
Graysburg (Kimble)	1934							5,000												
Holzmark	1939	5		5	17	3	7,383	58,274							1	1				
Medio Creek	1942								1							1				
Normanna	1930	1	2	3	5	2	3,532	62,695												
Normanna, North	1938							776												
Pettus	1930		28	28	20	¾	47,293	9,030,213												
Pettus (New)	1933		50	50	303	6	95,422	777,947												
Pettus, North	1934							3,316,125	1							1				
Plummer	1937	6	5	11	35	3	13,972	284,738												
Ray	1935		10	10	21	2	26,209	1,604,299												
Rutledge	1935							21,000												
S. Caesar	1942	8		8	401	50	86,064	86,064	10						6	16				
Strauch (McMurry)	1937		2	2				7,767												
Thompson											1				1	2				
Tuleta	1934	3	14	17	45	3	22,992	1,866,252												
Tuleta, West											1				1	2				
Tulsita	1939		1	1	4	4	1,479	11,193												
Voss	1936							77,340												
Brooks:																				
Kelsey																	1			1
La Gloria											2				1	3				

* Data for October, 1942.

Continued on page 174

Baash-Ross News

BAASH-ROSS TOOL COMPANY · LOS ANGELES · HOUSTON · NEW YORK

OIL WEEKLY EDITION

Priority Troubles?

WHY NOT MAKE YOUR SPARE DRILL COLLAR INTO A MODERN HEX KELLY!

Here Are Helpful Suggestions For Doing The Job

Most oil men today are generally agreed on one point—that for top dollar performance... for longest service life... and for lowest maintenance... the Hexagonal Kelly stands definitely out in front as the *one* type of kelly that meets *all* modern drilling requirements. For example...

- A Hex Kelly stays straight longer because it is 23.2% more resistant to common bending stresses than the same sized square kelly...
- A Hex Kelly is *better balanced* for today's high speeds because it is *machined* to shape, permitting closer tolerance controls...
- A Hex Kelly has 48% more circulation area than a comparable sized square, providing ample fluid passage for modern high-volume pumps....
- A Hex Kelly has 28.6% greater *torsional* strength... and 1.8% more *tensile* strength than comparable square kellys—two *vital* advantages...
- And finally, the Hex will handle ALL types of drilling—*both* regular and pressure work—*without change!*

If you already have Hex Kellys working on your rigs, you know by actual performance why they are today's outstanding kelly value. But if lack of necessary wartime priorities makes actual purchase of *new* kellys impossible, Baash-Ross engineers have worked out a simple solution that may enable you to obtain many advantages of Hex Kelly construction without the need for new equipment purchases whatever. Here's how:

You probably have a spare drill collar on your racks that can be economically machined into a Hex Kelly. But in selecting a drill collar for this change-over, keep these points in mind...

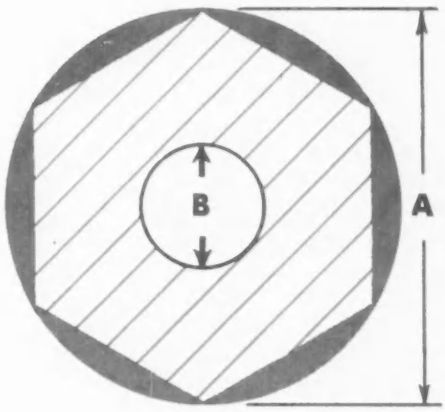
1. Allow 16" for the top upset and 20" for the bottom upset.
2. The remaining distance (the driving area) should be 35 to 37 feet long to handle Range II pipe lengths.

Thus, a 39 foot drill collar, after allowing 3 feet for top and bottom upsets, will give you a finished Hex Kelly with a driving area about 36 feet long—ample for Range II pipe.

The size of the collar and the size of the kelly it will make are shown in the table below. A 7" diameter round collar of proper length, for example, will machine into a kelly capable of handling 4½" or 5 $\frac{3}{16}$" drill pipe. It should have a bore of not more than 3½" to 4" to assure ample strength factors after outside stock has been cut away to make the hex "flats."

And here's a point to remember: If your spare drill collar is a Baash-Ross "Trubore," it will probably meet the specifications suggested in the table as to diameter and bore for the given pipe size. Any collar you use, of course, must be of the non-tapering type to provide for full length Hex Kelly construction.

For further information on this conservation suggestion, write to the Baash-Ross Tool Co., Los Angeles, California.



The Table below shows the size Hex Kellys you can make from various diameter drill collars. Allow 16" for top upset and 20" for bottom upset. There should be at least 35 feet of hexagonal driving area to handle Range II pipe lengths.

If the diameter "A" of your drill collar is...	7¾" to 8"	7"	5¾"	5"	4¼"
And the bore "B" is...	3½"-4¼"	3½"-4"	2⅞"-3½"	2"-2½"	1½"-2"
You can make a Hex Kelly to handle pipe sizes...	5$\frac{5}{16}$"-6⅝"	4½"-5$\frac{5}{16}$"	3½"-4½"	2½"-3½"	2⅜", 2½", 3½"

Drive your new Hex Kelly with a Baash-Ross Kelly Bushing!

The smooth, even, frictionless feed of the Baash-Ross Roller Kelly Bushing in all types of drilling—under all conditions—makes it the ideal tool to use with your Hex Kelly. The better performance of your Hex, plus the full control over bit and drill string you get with this roller bushing is an unbeatable combination for every operation.

Baash-Ross Kelly Bushings—for either hexagonal or square kellys—are built through and through to take the punishment of modern high speed drilling operations. In fact, this equipment will withstand rotational speeds of a thousand r.p.m. or more—far greater than present-day speeds, proof of the stamina engineered into these units. Simple, low-cost maintenance... easy replacement of wearing parts... superior kelly control on every job—these are the performance points you want—and get—in Baash-Ross Roller Kelly Bushings. Ask your nearest Baash-Ross representative for details—or write direct!

Lower Texas Gulf Coast—Continued

COUNTY AND FIELD	Year Found	*OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
					*Daily at End of 1942															
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Calhoun:																				
Coloma Creek	1941	2		2	59	30	21,963	43,280							1	1				
Heyser	1936	209	28	237	9,300	39	2,926,870	17,164,014												
Jay Welder (Duck Bay)	1940	4		4	142	36	44,845	90,502							1	1				
Port Lavaca	1934							363,071							1	1				
Colorado:																				
Buck Snag Field	1942	1		1			637	637	1							1				
Garwood															1	1				
Sheridan											2					2				
De Witt:																				
Nordheim	1942								1							1				
Thomaston	1940						1,044	8,248												
Yorktown	1942										2					2				
Fayette:																				
Cistern	1942									1						1				
Goliad:																				
Diamond Half	1940		9	9	61	7	18,260	629,364												
Hordes Creek	1935	1		1	21	21	7,758	77,421												
Sarco	1938						347	3,330												
Sarco Creek	1942									1						1				
Slick	1931						62	79,993												
Weser	1936	1	2	3	4	1	6,413	31,896												
Hidalgo:																				
Alamo	1942								1							1				
La Blanca	1937							593,738												
La Reforma															1	1				
McAllen (Pharr)	1938							13,042	1							1				
Mercedes (Capsillo)	1935							184,354												
Nichols (Weslaco)	1938	11	3	14	423	30	122,148	178,579	4						1	5				
Penitas	1942								1							1				
Salvador (Las Mestenas)	1937							157,621												
Sam Fordyce	1934	1	47	48	257	5	124,261	7,347,782												
Sam Fordyce, North	1937		5	5	21	4	9,159	205,207												
Sullivan City	1939	25	8	33	206	6	145,626	490,089			1					1				
Unclassified																				
Jackson:																				
Collier	1942								1							1				
Cordele	1938	30	14	44	710	16	326,671	2,354,018												
Edna	1937							4,493		1						1				
Francitas	1938	10		10	206	21	65,584	323,334	3		1					4				
Ganado	1935		6	6	113	19	45,724	227,657	18						1	19				
Ganado (Deep)	1941	30		30	948	32	252,057	316,108												
Harmon	1942	8		8	381	48	111,533	111,533	9						1	10				
Lolita	1940	175	2	177	6,591	37	2,258,006	3,919,235	17						2	19				
Looney's Branch									3							3				
Maubro (La Ward)	1941	55	2	57	1,520	3	505,367	708,330	35						2	37				
Mauritz	1935	7	1	8	198	25	65,699	568,420												
Mayo	1942	15		15	521	35	99,689	99,689	15	1					1	17				
Mustang Creek	1942								1							1				
Navidad															1	1				
N. La Ward	1941	67	2	69	1,758	25	543,334	573,748	59	1	1				1	62	1			1
Stewart	1942	4		4	210	53	26,768	26,768	4						4	8				
Texana	1939	1		1	22	22	8,683	23,264		2					4	6				
Vanderbilt	1934							195,533												
West Ganado	1940	32		32	1,028	32	326,661	421,011	9						3	12				
West Mauritz	1942	3	1	4	268	67	34,523	34,523	5						1	6				
West Ranch	1938	373	4	377	15,978	42	5,243,272	11,067,815	21	2					1	24				
Jim Wells:																				
Alfred	1938	17	5	22	163	7	105,171	472,227												
Alfred, West															1	1				
Alice	1938	43	9	52	449	9	231,897	2,760,608									1			1
Armagosa										1						1				
Bandera	1939							1,115												
Ben Bolt	1939	66	1	67	1,014	15	391,650	2,033,466	5	3	2				7	17				
Bentonville (Capt. Lucey)	1932	2	4	6	49	8	28,775	518,995												
Blucher	1939							2,991												
Camada	1939				2		409	4,082												
Clark-Muile	1939							43,835												
East Premont	1938							275,113												
Gallagher	1940	3		3	3	1	17,615	75,371												
Haldeman (Seelig)	1941	1	1	2	17	9	8,592	15,646												
Henshaw	1940	1	1	2	49	25	18,168	40,551	1							1				
Koopman	1942	1		1	21	21	10,626	10,626	1						1	2				
La Gloria	1939	2		2	21	10	31,084	60,909	1						1	2				
Leandro									1							1				
Magnolia City	1939	2	1	3	39	13	19,208	158,527												
Odem	1940	42		42	1,389	33	366,805	408,380												
Orange Grove	1940	33	3	36	1,594	44	538,567	1,121,646	6	1					3	10				
Orange Grove, S. W.	1942									1						1				
Premont	1933	2	16	18	63	4	40,547	835,374							1	1				
Premont Prospect	1941	2		2	12	6	4,307	6,322												
Premont, South	1942									1						1				
Quinto Creek	1942	2		2	71	36	12,815	12,815	1	1					1	3				
Reynolds	1939	23	3	26	592	23	222,440	1,205,898												
Sandia	1937		2	2	2	1	630	21,809												
Seeligson	1941	81		81	264	3	254,939	414,168	50		1				1	52		1		1
Stratton									2		1				1	4				
Tom Graham (E. Alice)	1938	35		35	467	13	179,361	1,339,808												
Wade City	1939	85	10	95	3,079	32	1,124,765	2,917,223							2	2				
Unclassified										1	1					2				
Karnes:																				
Burnell	1938							1,118												
South Burnell	1937	1	24	25	38	2	40,826	1,015,173												
Kleberg:																				
Baffins Bay	1940							3,678												
Bird Island	1939	1		1	6	6	6,133	38,527												
Kingsville	1926	1	1	2	29	15	9,737	802,516	1						1	2				
Seeligson									6						1	7				
Stratton									17							17				
Stratton, East									7		1					8				

*Data for October.

Continued on page 176

1941 A NEW PRODUCT

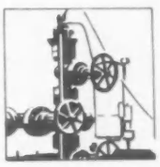
1942 AN OLD FRIEND

BY its effective performance, Parid P-51 won many friends and users during recent years. If the advent of cooler weather brings a paraffin problem to your lease, check up on the performance of Parid P-51 . . . or, better still, *try some*. The low price of Parid makes this easy to do . . . the results with Parid will send you "back for more."

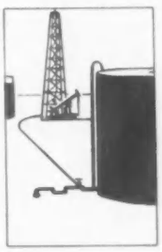
Parid P-51 eliminates paraffin from tubing, lead and flow lines of pumping wells. It can be used at its full strength, or dispersed in water. Parid is easy to use . . . available at your supply store . . . in fifty gallon drums or five gallon cans.

Ask your supply store for the Parid P-51 booklet. It carries useful information regarding the removal of paraffin from tubing, lead and flow lines.

FOR PUMPING WELLS
Parid P-51 may be poured into the tubing between the polish rod and the tubing walls, by raising the stuffing box; or Parid P-51 may be introduced in water dispersion without shutting down the well.



FOR FLOWING WELLS
The fluid level is dropped by shutting in the well, a pressure lubricator is connected with the tubing and the solvent is introduced into tubing under pressure.



FOR FLOW LINES
With the line as free of oil as possible, Parid P-51 is lubricated into the lead line at the well head. Gas from the casing is allowed to blow the Parid Solvent along the line, to get proper distribution. After standing for two hours or more, the line is flushed with oil.

P-51

PARID

REG. U. S. PAT. OFF

Sold by

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Lower Texas Gulf Coast—Continued

COUNTY AND FIELD	Year Found	*OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	*Daily at End of 1942 Whole Field	*Daily at End of 1942 Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Lavaca:																				
Brushy Creek																				
Provident City	1942								1		1					1				
Vienna	1941							1,496												
Live Oak:																				
Dinero (Lucas, North)	1935							95,593												
Fort Merrill	1935							65,359												
Lucas (Mt. Lucas)	1935		3	3	41	14	14,818	307,293												
McNeill	1934	4		4	14	3½	5,624	228,696												
N. Jacob									1							1				
Oakville	1937	24	7	31	671	22	257,931	840,866	9							9				
White Creek	1939	30		30	255	9	89,388	335,586							1	1				
White Creek, South	1941	5		5	231	46	56,510	61,630	1						4	5				
Whittington	1935							3,237												
Nueces:																				
Agua Dulce	1930	91	5	96	1,657	17	721,555	2,064,324	38	1	6		1		7	53				
Banquette															1	1				
Banquette, North															1	1				
Chapman Ranch	1937		2	2	36	18	15,312	67,077												
Clara Driscoll	1935	8	12	20	286	14	132,106	2,200,276												
Clara Driscoll, South	1937	62	43	105	623	6	528,337	2,446,658	3						1	4				
Corpus Christi		1	9	10	283	28	107,299	107,299												
East Flour Bluff	1940	20		20	47	2	90,632	345,585	1	1						2				
Flour Bluff	1936	75	16	91	170	2	322,431	7,318,348												
Gandy (Driscoll Ranch)	1939		9	9	133	15	80,874	197,455												
King	1937	65	7	72	1,815	25	630,217	1,940,054	7						1	8				
London	1937		3	3	29	10	12,185	98,653							1	1				
Luby	1937	139	8	147	1,116	8	768,317	7,646,173	1							1				
Luby (Deep)	1941	1		1	4	4	4,769	17,440												
Luby, North	1939	1	2	3	77	36	28,323	99,579	2						2	4				
Minnie Bock	1939	16	48	64	2,040	32	757,246	1,883,900	7		1					8				
Petronilla	1941	5		5	57	11	29,826	43,738												
Riverside	1939	2		2	66	33	23,843	111,505												
Robstown	1939	3		3	4	1	14,492	80,423												
Saxet	1923	42	224	266	3,673	14	1,348,700	29,376,627												
Saxet (Deep, Frio)	1923	27	69	96	2,874	30	1,107,301	23,865,560												
Saxet Heights	1935							6,654,349												
Saxet, South (Baldwin)	1935		8	8	64	8	43,613	859,029												
Saxet, West (Turkey Crk.)	1938	37	17	54	1,474	27	530,860	4,342,680												
Shield	1940	8	1	9	283	32	102,845	211,085	1							1				
Stratton	1931	122		122	1,239	10	666,254	1,440,967	16		6					22				
Stratton, East									4							4				
Sullivan (S. Agua Dulce)	1936							98,275												
Refugio:																				
Bonnieview	1939							4,580												
Fagan	1940	4		4	18	4½	43,017	198,759	1						1	2				
Greta	1933	145	46	191	1,154	6	1,091,160	28,242,423	6							6				
Greta (Deep)	1933	9		9	138	15	82,156	1,199,591												
La Rosa	1938	82	2	84	116	1	359,752	3,585,969												
McFadden	1932	76	13	89	3,236	36	834,069	3,507,156	7						2	9				
McFadden, South									3							3				
Melon Creek	1939	10		10	515	52	150,747	560,998												
Mission River	1938	12	6	18	795	44	250,608	968,395	1							1				
O'Connor	1931		4	4	55	14	19,136	597,239												
Refugio (Deep)	1920	82	20	102	2,279	22	1,016,416	18,119,369												
Refugio (Fox)	1940	15	3	18	77	4	78,580	4,236,982												
Refugio, North	1941	6	1	7	34	5	26,626	51,626	5						1	6				
Refugio (Shallow)	1928	11	25	36	403	11	176,157	22,154,175												
Rooke	1942								1							1				
Tomoconnor	1934	447	1	448	23,662	53	6,914,652	33,570,343							1	1				
Woodsboro	1941	3		3	46	15	24,588	56,478												
San Patricio:																				
Angelita	1934							33,972												
Aransas Pass (McCampbell)	1936	79	117	196	436	2	626,031	11,315,650												
East Mathis	1940	1		1	3	3	2,540	14,711												
Midway	1937	50	3	53	2,671	50	869,643	2,431,925	12						3	15				
Odem									29	2					6	37				
Plymouth	1935	169	16	185	9,379	51	2,762,852	25,698,206	4							4				
Rooke	1942	3		3	16	5	6,422	6,422	2							2				
Sinton	1934	1		1				68,300												
Sinton, South	1942								1		1					2				
Taft	1935	46	23	69	584	8	358,126	5,343,748												
White Point	1930		1	1	49	49	23,720	155,607												
White Point, East	1938	232	3	235	10,311	44	2,859,606	11,165,524												
Victoria:																				
Coletto Creek	1934	27	7	34	404	12	165,614	1,537,121	2							2				
Cologne	1939	8		8	244	30½	74,434	114,059	2	1						3				
Keeran	1932	17	6	23	122	5	118,831	1,752,542							1	1				
McFaddin															1	1	1			1
McFaddin, North	1937	4		4	20	5	13,135	63,565		1						1				
Placedo	1935	55	104	159	3,856	24	1,132,957	13,607,600	3							3				
Placedo, (East Extension)	1937	22	1	23	66	3	98,899	586,671	9							9				
Telferner	1938		2	2	14	7	5,625	50,417												
Terrell	1940		1	1	7	7	3,085	13,415							1	1				
Victoria	1940	3	13	16	257	16	97,659	316,613	1							1				
Willacy:																				
La Sal Vieja	1936							15,000												
Willamar	1940	7		7	43	6	28,431	79,072	2							2				
Total Lower Texas Gulf Coast		3,951	1,338	5,289	131,706	25	46,319,739	376,585,088	504	25	33	...	1	...	96	659	4	1	...	5

* Data for October, 1942.

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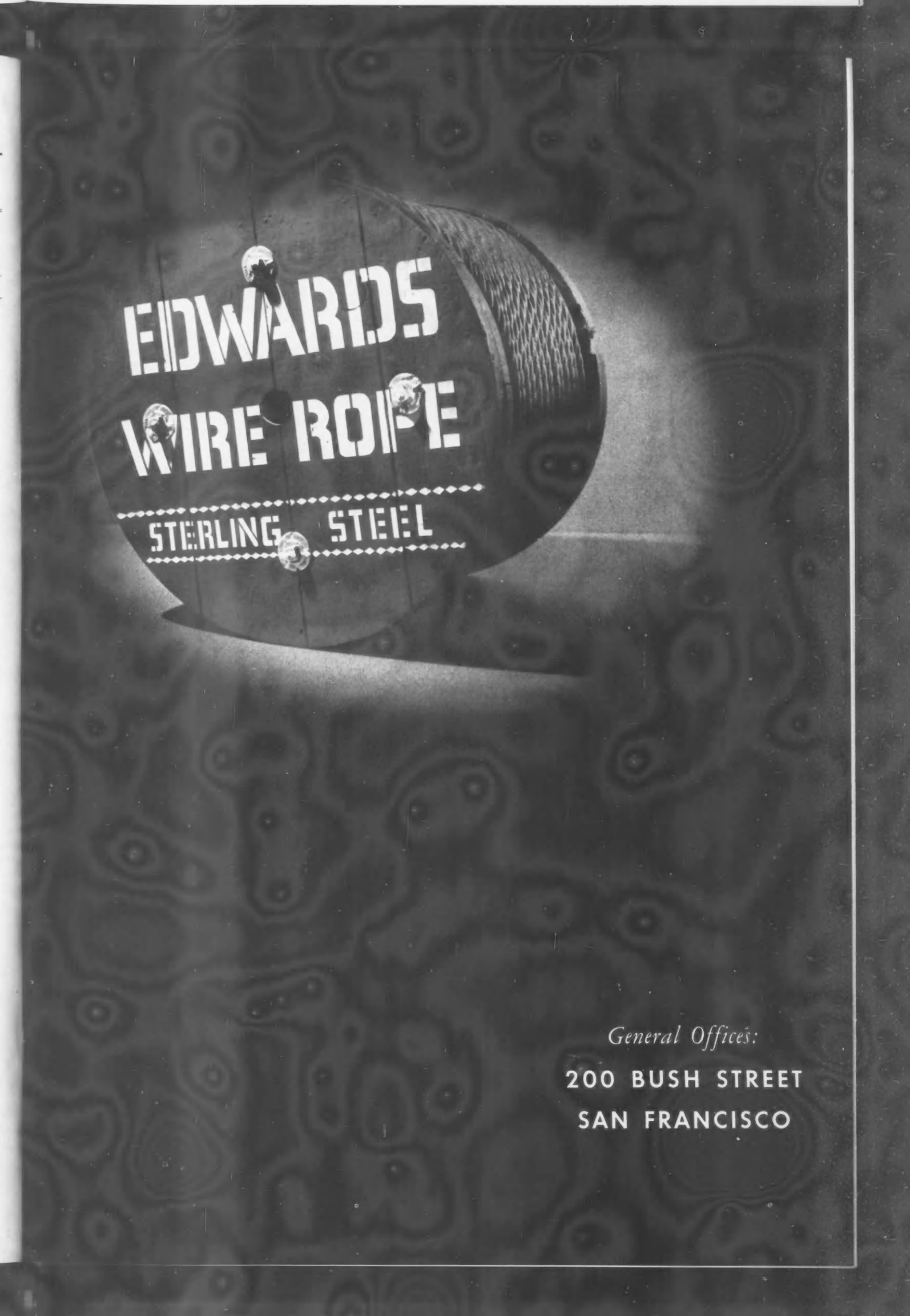

General Offices:

200 BUSH STREET

SAN FRANCISCO

Southwest Texas

COUNTY AND FIELD	Year Found	*OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
					*Daily at End of 1942														
		Flowing	Artificial Lift	Total	Whole Field	Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Brooks:																				
Alta Mesa	1926	2	31	33	243	7	167,329	1,194,099												
Alta Verde	1938							8,786												
Duval:																				
Agua Preita	1941	1		1	77		2,721	6,616							1	1				
Blanchard (Muralla)	1939	2		2	3	2	4,730	42,443												
Bridwell	1940	10		10	13	1	27,223	103,707												
Cadena	1942		1	1	32	32	2,502	2,502	1							1				
Casa Blanca	1938		47	47	307	7	113,423	572,362	10						1	11				
Casa Blanca, North	1939		9	9	61	7	25,081	116,357												
Casa Blanca, West	1941		16	16	97	6	38,261	82,200												
Cedro Hill	1939	14	63	77	492	6	196,264	709,295												
Charamousca	1937		18	18	170	9	74,544	654,041												
Charamousca, South	1941	1	15	16	110	7	47,601	113,205												
Chiltipin	1939	5		5	32	6	10,744	39,904												
Colmena	1934		20	20	163	8	59,745	434,815												
Conoco-Driscoll	1927	57	3	60	2,515	42	923,643	4,702,469	13	1					2	16				
East Benavides	1941	1		1	18	18	5,567	13,157												
Fitzsimmons	1938	60	18	78	110	1	181,224	2,570,839												
Fitzsimmons, East	1940							583												
Garza	1942								1						1	2				
Government Wells, North	1928		407	407	2,659	7	1,365,006	45,796,808												
Government Wells, No. 1800' Sand			3	3	51	17	18,854	18,854	2						4	6				
Government Wells, North Yegua	1941	1		1	32	32	14,031	14,268												
Government Wells, South	1930		232	232	514	2	725,382	3,855,205												
Hoffman	1935	4	335	339	3,408	10	1,330,674	8,892,420	8						2	10				
Kohler	1926	7	1	8	27	3	11,577	636,616	2	1						3				
Kohler (Deep)	1936	2		2	15	8	5,809	54,158												
Kreis	1941		9	9	119	13	47,721	70,959	1						5	6				
Labbe	1937	2	10	12	149	12	46,741	425,957												
Loma Novio	1934		557	557	4,273	8	1,716,737	26,711,280												
Loma Vista	1936	1		1	6	6	642	14,371												
Longhorn	1938	28	14	42	1,042	25	317,222	1,855,149												
Lundell	1937	34	60	94	1,092	12	329,849	1,415,998												
Nelson	1941							7,773												
Neuhaus	1941	1	1	2	7	4	11,711	11,771												
North Sweden (Benavides)	1937	96	125	221	1,938	9	743,002	11,464,407												
Palangana	1938							1,765												
Peters	1933	1	3	4	56	14	24,635	235,447							1	1				
Peters, East	1940	1	2	3	22	7	7,484	26,920												
Piedre de Lumbre	1935	8	122	130	2,086	16	545,465	3,188,625	1						3	4				
Piedras Pintas	1925							148,295												
Rancho Solo	1937		21	21	93	4	36,459	280,257												
Rancho Solo (Extension)	1940	1	8	9	60	7	22,501	167,496												
Rios															1	1				
S. R. C.	1930							203,000												
Sarnosa	1932		37	37	208	6	115,098	2,653,735												
Sejita	1940	1		1	7	7	8,967	10,567	2		1				2	5				
Seven Sisters	1935	3	386	389	5,533	14	2,071,917	17,588,145	3						3	6				
Seven Sisters, South	1937		28	28	110	4	48,068	680,832												
Southland	1939	3		3	59	20	24,235	126,983												
Sweden	1937	2	3	5	43	9	19,946	251,122												
Tarancuas	1940	1	28	29	62	2	108,886	409,684							2	2				
Tesoro (De Soto)	1938	2		2	4	2	6,454	208,793												
Thomas Lockhart	1937							16,296												
Unclassified									1							1				
Jim Hogg:																				
Alworth	1929							27,000												
Chaparosa									2						1	3				
Colorado	1936	201	25	226	315	1	398,716	2,330,145	40						5	45				
Eagle Hill	1933		53	53	293	6	212,430	1,671,398												
East	1942			?	9		425	425	1							1				
Henne-Winch-Farris	1926			?	5		1,320	3,216,058												
Holbein	1940		10	10	40	4	41,595	78,680	1						1	2				
Holland-Hebbronville	1940							1,351												
Kelsey	1938	110		110	129	1	250,758	1,999,635												
Las Animas	1938	1	6	7	28	4	13,807	58,627	2							2				
Manila	1940	2	19	21	80	4	66,771	224,312												
Randado	1925		82	82	167	2	66,969	4,858,004							1	1				
McMullen:																				
Calliham	1924		53	53	119	2	47,481	1,043,764												
Campana	1940		1	1				831												
Campana, South	1941	11		11	141	13	52,855	60,216	7	1						8				
Ezzell	1937		128	128	739	6	250,318	2,788,066												
Green Branch	1942									1					1	2				
Jacobs	1932		71	71	224	3	84,108	1,655,574												
Loma Alta	1935		3	3	44	15	16,469	162,610												
Munson	1938		11	11	46	4	18,551	186,052												
Starr:																				
Barbacoas	1934	1		1	1	1	449	33,761												
Boyle	1940	11	1	12	248	21	66,355	164,255	1							1				
Cuevitas (Guerra)	1933	9	4	13	233	18	74,607	1,287,496												
Frost	1942	1		1	11	11	2,991	2,991	1							1				
Garcia	1942	3		3	42	14	23,577	23,577	4						2	6				
La Reforma	1938	1		1	19	19	6,716	20,375							1	1				
La Reforma, South															1	1				
Los Olmos	1931		75	75	28		21,768	649,369												
North Rincon	1939	7	3	10	20	2	43,872	139,407		1					1	2				
Ricaby	1937	3	6	9	3	½	18,019	131,595							1	1				
Rincon	1938	135	7	142	6,377	45	1,767,573	3,697,726	28				1		4	33				
Rio Grande City	1932		20	20	49	2	32,652	445,829												
Roma	1929						187	15,119												
South Ricaby (El Tanque)	1937	1	14	15	26	2	25,688	444,557												
Sun	1938	79	3	82	113	1	286,997	1,155,987	17						6	23				
Sun, North	1941	7		7	16	2	25,139	25,807	3						3	6				
Ulrich	1942								1						3	4				
Yturria	1941	12		12	29	2	52,880	61,184	8						2	10				
Yzaguirre	1940		1	1	2	2	1,142	5,529							1	1				
Zim	1939	2		2				292												

* Data for October, 1942.

Southwest Texas—Continued

COUNTY AND FIELD	Year Found	[c]OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	[c]Daily at End of 1942 Whole Field	[c]Daily at End of 1942 Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Webb:																				
Adami	1939	.....	64	64	250	4	102,175	488,148	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....
Albercas	1928	.....	8	8	27	3	10,883	2,542,252	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Aviators	1922	.....	73	73	253	3	89,657	6,176,222	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Bruni	1938	1	14	15	49	3	18,030	2,855,052	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Carolina-Texas	1926	.....	.....	.....	.....	.....	.....	256,670	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Cole	1940	.....	.....	.....	.....	.....	480	4,466	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Cole, East	1941	.....	4	4	19	5	7,556	9,734	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Cole, West	1924	.....	66	66	422	6	161,101	4,797,861	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
East Bruni	1937	.....	11	11	44	4	16,112	126,186	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glenn	1940	24	46	70	1,148	16	346,131	848,828	.....	.....	.....	.....	.....	.....	1	1	.....	1	.....	1
Killam	1937	.....	89	89	577	6	224,752	1,111,054	4	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....
Killam, North	1938	.....	4	4	22	6	10,424	85,635	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Laurell	1932	.....	4	4	11	3	4,134	623,496	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Lopez	1935	1	311	312	2,428	8	1,010,148	12,447,398	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lykes	1942	.....	1	1	4	4	1,237	1,237	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
McLean	1942	.....	5	5	173	35	61,961	61,961	4	.....	.....	.....	.....	.....	4	8	.....	.....	.....	.....
Mirando City	1926	.....	63	63	277	4	97,203	9,989,048	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Moca	1933	.....	11	11	157	14	62,470	1,197,188	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
O'Hern	1936	.....	182	182	1,956	11	774,177	10,533,201	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oilton	1937	.....	69	69	252	4	104,526	1,663,117	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Volpe	1939	.....	28	28	396	14	123,076	476,510	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Unclassified		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Zapata:																				
Charco Redondo	1926	.....	28	28	30	1	1,666	165,608	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Comitas	1934	.....	147	147	300	2	125,052	1,659,007	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuellar	1928	.....	24	24	35	1	15,261	2,635,009	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Escobas	1930	.....	261	261	842	3	281,262	8,213,969	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Glen	1940	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Jennings	1932	.....	71	71	287	4	158,184	2,096,632	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lopeno		.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	2	4	.....	.....	.....	.....
Mirando Valley	1926	2	66	68	242	4	97,581	1,483,379	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total Southwest Texas	.....	976	4,878	5,854	47,845	8	19,471,873	239,902,086	174	7	1	...	1	...	78	261	...	1	1	2

South Central Texas

Atascosa:																				
Imogene	1942	.....	.....	.....	.....	.....	838	838	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Bastrop:																				
Bateman (North Dale)	1933	.....	3	3	4	1	3,829	623,424	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Carroll	1933	.....	.....	.....	.....	.....	.....	100,518	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Cedar Creek	1933	.....	7	7	38	5	12,147	302,132	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cedar Creek, North	1940	.....	.....	.....	.....	.....	.....	7,999	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	1941	.....	.....	.....	.....	.....	180	3,780	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hilbig	1933	12	1	13	195	15	68,497	1,682,418	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lentz	1941	.....	3	3	30	10	11,525	17,312	.....	.....	.....	.....	.....	.....	3	3	.....	.....	.....	.....
Riddle	1938	.....	3	3	26	9	9,834	85,815	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Schimmel-Batts	1935	.....	.....	.....	.....	.....	.....	7,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Yost	1928	.....	4	4	9	2	3,998	986,664	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bexar:																				
[1]Alta Vista	1930	.....	18	18	5	¼	1,127	57,053	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cooksey	1930	.....	.....	.....	.....	.....	.....	61,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dupree	1936	.....	3	3	3	1	315	9,315	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eckert	1928	.....	101	101	55	½	24,888	972,808	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Espanda Mission	1940	.....	.....	.....	.....	.....	.....	25,689	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fairfield (LaCoste)	1938	.....	1	1	.....	.....	396	4,661	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gas Ridge	1937	.....	64	64	45	¾	18,330	47,580	5	.....	.....	.....	.....	.....	1	6	.....	.....	.....	.....
Jones	1916	.....	2	2	.....	.....	171	2,858	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lone Oak	1935	.....	.....	.....	.....	.....	.....	2,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mission	1912	.....	.....	.....	.....	.....	.....	925	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philtop	1940	.....	?	?	3	.....	741	8,540	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerset	1919	.....	715	715	373	½	149,850	11,500,749	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Southton (Yturri-Southton)	1922	.....	104	104	39	½	15,920	696,836	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Van Ormy	1935	.....	98	98	67	⅔	25,586	292,809	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Burleson:																				
Tanglewood (Chriesman)	1938	.....	.....	.....	.....	.....	.....	14,429	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Caldwell:																				
Bee Creek	1940	.....	32	32	183	6	95,782	255,239	7	.....	.....	.....	.....	.....	2	9	.....	.....	.....	.....
Bob Rose	1932	.....	.....	?	6	.....	3,644	47,135	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
[2]Branyon	1928	.....	9	9	22	2½	8,900	2,491,752	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Buchanan	1929	.....	23	23	70	3	26,292	471,045	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Burdette Wells	1937	.....	2	2	2	1	1,341	14,743	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dale	1927	.....	42	42	112	3	40,137	1,506,533	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dale, West	1940	.....	9	9	37	4	13,686	106,422	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dunlap	1931	.....	7	7	36	5	12,921	348,333	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lockhart (Larremore)	1928	.....	12	12	37	3	13,701	340,349	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Luling	1923	.....	722	722	5,111	7	1,925,673	79,287,347	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lytton Springs	1925	.....	142	142	254	2	93,118	8,273,965	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Salt Flats	1928	6	261	267	2,634	10	1,019,848	43,603,088	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Salt Flat, North	1939	.....	1	1	6	6	1,799	30,680	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenney Creek	1940	14	10	24	256	11	114,516	209,087	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Walnut Creek	1938	.....	1	1	2	2	857	14,013	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Yancy	.....	.....	1	1	1	1	100	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dimmitt:																				
Carrizo	1941	1	.....	1	3	3	960	6,168	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Pendencia Creek	1941	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Frio:																				
Pearsall	1935	11	24	35	408	12	180,429	1,702,267	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Pearsall Townsite	1942	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Schattel	1938	.....	.....	.....	.....	.....	.....	633	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gonzales:																				
Ottine	1929	.....	.....	.....	.....	.....	.....	12,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[c] Data for October, 1942. [1] Includes Coffey Field. [2] Includes Ellison-Young.

Continued on page 180

South Central Texas—Continued

COUNTY AND FIELD	Year Found	*OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942							OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	*Daily at End of 1942 Whole Field	*Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Guadalupe:																				
[3]Carver-Kallison	1937	.....	.....	.....	.....	.....	.....	50,786	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clark	1940	.....	2	2	20	10	7,642	393,611	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Darst Creek	1929	7	337	344	6,642	19	2,181,680	53,709,403	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Day	1940	.....	.....	.....	.....	.....	.....	4,386	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lavernia (Elm Creek)	1939	.....	30	30	3	.....	10,872	36,877	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Manford	1929	.....	1	1	9	9	7,163	360,031	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Spiller	1938	.....	3	3	10	3	3,902	21,417	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Staples	1935	.....	.....	.....	.....	.....	.....	2,033	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Zoborowski	1931	.....	14	14	39	3	15,367	239,759	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kimble:																				
Bolt	...	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
La Salle:																				
Washburn	1940	8	2	10	210	21	76,621	96,297	7	...	.....	.....	.....	.....	3	10	.....	.....	.....	.....
Maverick:																				
Chittim	....	.....	.....	.....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Medina:																				
Chicon Lake	1934	.....	76	76	37	½	16,277	88,407	2	1	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
Dunlay	1938	.....	.....	.....	.....	.....	.....	2,029	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Taylor-Ina	1935	.....	9	9	9	1	3,887	162,625	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milam:																				
Minerva Rockdale	1922	.....	410	410	169	½	67,666	3,508,186	3	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
Travis:																				
Manda (Kimbro)	1934	.....	4	4	1	¼	432	29,629	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Williamson:																				
Chapman-Abbott	1930	.....	71	71	151	2	57,496	4,567,793	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Matthews	1940	.....	10	10	12	1	5,111	133,428	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Noack	1940	.....	31	31	36	1	14,563	433,887	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Thrall	1915	.....	20	20	49	2	17,151	1,990,724	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wilson:																				
Floresville	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	3	.....	.....	.....	.....
Poth	1942	.....	1	1	2	2	402	402	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
Zavalla:																				
Batesville	1937	.....	.....	.....	.....	.....	.....	12,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total S. Central Texas	.....	60	3,447	3,507	17,471	5	6,399 819	222,099,305	32	1	.....	.....	.....	.....	19	52	.....	.....	.....	.....

* Data for October, 1942. [3] Formerly Nash Creek.

Utah

San Juan:																				
San Juan	1910	.....	.....	.....	.....	.....	Abnd.	14,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington:																				
Virgin	1908	.....	5	5	16	3	6,381	188,006	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total Utah	....	.....	5	5	16	3	6,381	202,006	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..

West Virginia

SUMMARY— *Total West Virginia	1860	.....	17,900	17,900	8,900	0.5	3,663,000	417,866,000	118	494	...	...	...	...	99	711	4	44	5	53

* Details on well completions, by counties, given below.

COUNTY AND FIELD	NEW WELLS COMPLETED IN 1942					OLD WELLS DRILLED DEEPER IN 1942			
	Oil	Gas	Gas Input	Dry	Total	Oil	Gas	Dry	Total
Barbour	...	1	...	...	1	...	...	...	...
Boone	4	25	...	3	32	...	1	...	1
Braxton	1	11	...	4	16	...	3	2	5
Brooke	...	...	...	1	1	...	...	...	...
Cabel	...	7	...	...	7	...	...	...	...
Calhoun	36	38	...	7	81	1	...	...	1
Clay	9	26	...	6	41	...	1	1	2
Doddridge	2	3	...	1	6	...	1	...	1
Gilmer	3	23	...	8	34	2	1	...	3
Hancock	4	...	...	...	4	...	...	...	...
Harrison	1	4	...	1	6	...	...	...	...
Jackson	3	147	...	11	161	...	...	...	...
Kanawha	6	49	...	9	64	...	...	...	...
Lewis	2	2	...	1	5	...	...	...	...
Lewis	...	...	...	1	1	...	...	...	...
Lincoln	3	17	...	1	21	1	22	...	23
Logan	...	6	...	1	7	...	...	...	...
Marion	5	...	...	2	7	...	1	...	1
Marshall	...	3	...	4	7	...	2	...	2
Mason	...	...	...	2	2	...	...	...	...
Mingo	1	6	...	...	7	...	1	...	1
Monongalia	2	4	...	2	8	...	4	...	4
Pleasant	3	3	...	1	7	...	...	...	...
Putnam	...	41	...	5	46	...	1	...	1
Raleigh	...	1	...	...	1	...	...	...	...
Ritchie	13	18	...	9	40	...	3	1	4
Roane	4	1	...	4	9	...	...	...	...
Taylor	...	6	...	3	9	...	...	...	...
Tyler	4	1	...	1	6	...	...	...	...
Upshur	...	28	...	2	30	...	...	...	...
Wayne	1	12	...	...	13	...	...	...	...
Wetzel	...	7	...	6	13	...	2	1	3
Wirt	2	1	...	2	5	...	1	...	1
Wood	9	2	...	1	12	...	...	...	...
Wyoming	...	1	...	...	1	...	...	...	...
	118	494	...	99	711	4	44	5	53

Wyoming

COUNTY AND FIELD	Year Found	OIL PRODUCING WELLS AT END OF 1942			CRUDE OIL PRODUCTION (Barrels)				NEW WELLS COMPLETED IN 1942								OLD WELLS DRILLED DEEPER IN 1942			
		Flowing	Artificial Lift	Total	Daily at End of 1942 Whole Field	Daily at End of 1942 Av. Per Well	Year 1942	To End of 1942	Oil	Gas	Distillate	Wtr. Input	Gas Input	Wtr. Disposal	Dry	Total	Oil	Gas	Dry	Total
Albany:																				
Quealy	1934	.....	17	17	452	27	149,640	1,327,614	....	....	....	....	....	....	....	.....	....	....	....	....
Rex Lake	1923	.....	3	3	81	27	25,911	274,211	....	....	....	....	....	...	....	.....	....	....	....	....
Big Horn:																				
Byron	1922	.....	6	6	3,915	653	1,508,583	7,334,093	3	....	....	....	....	....	....	3	....	....	....	....
Garland	1907	.....	16	16	1,412	88	518,131	5,219,948	1	....	....	....	....	....	....	1	....	....	..	....
Greybull	1908	.....	3	3	.....	....	Shut-in	346,730	....	....	....	....	....	....	....	.....	....	....	..	....
Torchlight	1915	.....	2	2	.....	....	Shut-in	254,709	....	....	....	....	....	....	....	.....	....	....	....	....
Carbon:																				
Dutton Creek	1926	.....	10	10	45	5	15,606	303,352	....	....	....	....	....	....	....	.....	....	....	....	....
East Mahoney	1923	.....	2	2	32	16	17,879	}	....	....	....	....	....	....	....	.....	....	....	..	....
Mahoney	1930	.....	6	6	1,020	170	385,090	1,174,162	....	....	....	....	....	....	....	.....	....	....	....	....
Medicine Bow	1935	.....	4	4	632	158	246,409	4,041,477	....	....	....	....	....	....	....	.....	....	....	....	....
Rock Creek	1918	.....	14	14	2,480	177	928,693	21,702,068	....	....	....	....	....	....	....	.....	....	....	....	....
Rock River		.....	.....	.....	.....	....	.....	.....	2	....	....	....	....	....	....	2	....	....	....	....
Sherrard	1942	.....	.....	.....	.....	....	.....	.....	....	2	....	....	....	....	....	2	....	....	....	....
Simpson Ridge	1924	.....	3	3	.....	....	Shut-in	162,485	....	....	....	....	....	....	....	.....	....	....	....	....
Wertz	1920	15	.....	15	5,812	387	2,196,890	6,155,460	2	....	....	....	....	....	....	2	....	....	....	....
Unclassified	....	....	.....	.....	.....	....	.....	.....	1	....	....	....	....	....	1	2	....	....	....	....
Converse:																				
Big Muddy	1922	.....	138	138	1,115	8	401,163	27,417,950	....	....	....	....	....	....	....	.....	....	....	....	....
Fremont:																				
Alkali Butte	1928	.....	.....	.....	.....	....	.....	5,670	....	....	....	....	....	....	....	.....	....	....	....	....
Big Sand Draw	....	.....	.....	.....	.....	....	.....	.....	....	1	....	....	....	....	....	1	....	....	....	....
Circle Ridge	1923	.....	12	12	.....	....	Shut-in	.....	8	....	....	....	....	....	....	8	....	....	....	....
Dallas-Derby	1883	.....	28	28	473	169	149,648	3,286,886	....	....	....	....	....	....	....	.....	....	....	....	....
Lander (Hudson)	1912	.....	11	11	270	25	100,815	2,321,391	....	....	....	....	....	....	....	.....	....	....	....	....
Maverick Springs	1917	.....	32	32	1,742	54	775,263	1,278,261	....	....	....	....	....	....	....	.....	....	....	....	....
Pilot Butte	1916	.....	15	15	490	33	139,849	706,601	4	....	....	....	....	....	1	5	....	....	....	....
Hot Springs:																				
Black-Mountain	1923	.....	6	6	105	18	21,576	289,957	....	....	....	....	....	....	....	.....	....	....	....	....
Grass Creek	1914	.....	264	264	5,118	19	1,776,036	31,461,179	1	....	....	....	....	....	....	1	....	....	....	....
Hamilton Dome	1918	.....	34	34	1,072	32	402,780	5,959,213	....	....	....	....	....	....	....	.....	....	....	....	....
Warm Springs	1917	.....	11	11	72	7	18,884	409,768	....	....	....	....	....	....	....	.....	....	....	....	....
Laramie:																				
Horse Creek	1942	.....	.....	.....	.....	....	.....	.....	1	....	....	....	....	....	....	1	....	....	....	....
Natrona:																				
Cole Creek	1938	.....	18	18	1,220	68	365,117	867,362	3	....	....	....	....	....	1	4	....	....	....	....
Iron Creek	1917	.....	4	4	10	3	4,302	28,626	....	....	....	....	....	....	....	.....	....	....	....	....
Midway	1930	.....	2	2	.....	....	Shut-in	175,886	....	....	....	....	....	....	....	.....	....	....	....	....
Notches	1922	.....	4	4	340	85	38,571	205,625	....	....	....	....	....	....	....	.....	....	....	....	....
Poison Spider and South Casper Creek	1918	.....	39	39	522	13	233,207	3,953,422	1	....	....	....	....	....	....	1	....	....	..	....
Salt Creek	1908	9	1,215	1,224	13,435	11	5,054,846	303,704,601	....	....	....	....	....	....	....	.....	....	....	....	....
Spindletop	1928	.....	4	4	Shut-in	....	1,724	24,231	....	....	....	....	....	....	....	.....	....	....	....	....
Teapot	1922	.....	7	7	15	2	5,296	116,037	....	....	....	....	....	....	....	.....	....	....	....	....
Niobrara:																				
Ant Hills	1924	.....	1	1	.....	....	Shut-in	.....	....	....	....	....	....	....	....	.....	....	....	....	....
Lance Creek	1915	75	104	179	21,843	122	8,011,387	49,277,157	11	....	....	....	1	....	....	12	....	..	....	....
Mule Creek, East	1920	.....	42	42	345	8	127,428	1,445,506	....	....	....	....	....	....	....	.....	....	..	....	....
Park:																				
Badger Basin	1930	4	.....	4	125	31	43,438	471,402	....	....	....	....	....	....	....	.....	....	....	....	....
Cody Dome	....	.....	.....	.....	.....	....	.....	.....	1	....	....	....	....	....	....	1	....	....	....	....
Elk Basin	1915	1	97	98	410	4	177,689	11,576,738	1	1	....	....	....	....	....	2	....	....	....	....
Fourbear	1928	.....	1	1	.....	....	Shut-in	.....	....	....	....	....	....	....	....	.....	....	....	....	....
Frannie	1928	.....	24	24	3,211	134	1,166,653	6,767,983	6	....	....	....	....	....	....	6	....	....	....	....
Gooseberry	1936	.....	1	1	100	100	18,837	18,837	....	....	....	....	....	....	....	.....	....	....	....	....
Oregon Basin	1912	.....	78	78	15,231	195	4,429,991	20,807,184	25	....	....	....	....	....	....	25	....	....	....	....
Shoshone	1928	.....	3	3	93	31	43,842	106,961	....	....	....	....	....	....	....	.....	....	....	....	....
Unclassified	....	.....	.....	.....	.....	....	.....	.....	....	....	....	....	....	....	....	.....	1	....	....	1
Sublette:																				
La Barge	1924	.....	141	141	2,054	15	739,894	7,964,563	2	....	....	....	....	....	....	2	....	....	....	....
Sweetwater:																				
Baxter Basin	1922	.....	.....	.....	.....	....	.....	.....	....	1	....	....	....	....	....	1	....	....	....	....
Lost Soldier	1916	.....	81	81	6,510	80	2,373,846	25,204,638	2	....	....	....	....	....	....	2	....	....	....	....
Wertz	....	.....	.....	.....	.....	....	.....	.....	2	....	....	....	....	....	....	2	....	....	....	....
Uintah:																				
Spring Valley	1900	.....	1	1	.....	....	Shut-in	101,593	....	....	....	....	....	....	....	.....	....	....	....	....
Washakie:																				
Hidden Dome	1932	.....	17	17	55	3	22,023	360,613	....	....	....	....	....	....	....	.....	....	....	....	....
Weston:																				
Dewey Dome	1936	.....	1	1	.....	....	Shut-in	21,186	....	....	....	....	....	....	1	1	....	....	....	....
Osage	1920	.....	314	314	550	2	198,123	5,002,521	1	....	....	....	....	....	3	4	....	....	....	....
Unclassified	....	.....	.....	.....	.....	....	.....	837,632	....	....	....	....	....	....	....	.....	....	....	....	....
Total Wyoming	....	104	2,836	2,940	92,407	31	32,835,060	560,473,489	78	5	....	....	1	....	7	91	1	....	....	1

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3384

OPA Allows Price Increases in Some Fields

Moving to achieve greater uniformity in maximum crude prices, OPA on January 28 issued Amendment 63 to the Petroleum-Price Schedule, the principal effect of which, it was said will be felt in small pools whose production was sold under long-term contracts which did not take into consideration progressive increases in market prices, cost of production or changing market conditions.

The amendment provides that in the determination of the posted price, a price paid during the base period on a contract previously entered into shall not be considered in determining the maximum price unless the contract reflected current market conditions on or about October 1, 1941.

It is further provided that the maximum price of crude purchased at a point other than the receiving tank shall be at no greater differential than prevailed at the same point in October, 1941.

The new regulation authorizes the buyer and seller to establish a temporary differential for a sale at a point other than the receiving tank, subject to disapproval by OPA, when a maximum price cannot otherwise be determined under the provisions of the schedule.

OPA, at the same time established higher ceiling prices for crude at receiving tanks in several Texas, Louisiana, Kentucky and Arkansas pools, each of which, in general have had a single purchaser. The pools included are isolated instances where production was frozen at price levels which were abnormally low, or where normal relationship to crudes of comparable grades was not properly reflected. Producers and purchasers have agreed that the advance will not lead to a request for an increase in resale prices.

Under the order, the maximum price for Rincon field (Texas) for crude of 40 and above is increased from $1.32 to $1.45 per barrel, with customary differentials for crudes of lower gravity. The price for sour distillate from McKamie, Dorcheat, Macedonia and Big Creek pools (Arkansas) is increased from $1.15 to $1.25 per barrel. Olla, Little Creek and South Olla pools (Louisiana) crude of 40 gravity and above is increased from $1.30 to $1.35 per barrel. Similar crude from Shields field (Texas) is advanced from $1.25 to $1.35 per barrel, and retroactive to May 1, 1942, the maximum price for crude from Sebree pool (Kentucky) is increased from $1.25 to $1.32 per barrel.

Valve Standardization Planned to Save Metal

A standardization program for all types of valves except those used on ships has been adopted by WPB, under which the number of varieties will be reduced from 4079 to 2504.

Valves to be produced in the future are classified in the order by design, by materials used, by pressure and by size. Cross valves and brass or iron angle check valves are to be eliminated, and pressure classes are reduced from 18 to 12.

The order will cut down the use of brass and steel for valve manufacture, WPB officials estimating that about 1900 tons of copper will be saved an-

nually, together with about 4340 tons of alloy steel.

No brass valves in excess of two inches will be permitted. Steel valves in pressure classes of 150, 600, 900 and 1500 pounds are to follow specifications set forth by the American Standards Association or the American Petroleum Institute. For each pressure class, the order covers end flange faces, the materials for bodies and bonnets, seating materials for stems, bonnet bolting and bonnet bolt nuts. On valves of five inches or larger, the disc is to be of the same material as the body of the valve.

Iron valves of five pressure classes, from 25 to 300 pounds per square inch, and of 29 sizes from one fourth inch to 72 inches, are permitted under the order. On all types, end flanges are to conform to existing standards. Materials are specified for seating parts, bonnet bolts or studs, bonnet bolting and handwheels. Separate specifications are set up for gate valves, for globe, angle and cross valves and for check valves.

PAW Order Halts Gas Well Drilling at Hugoton

Development of gas fields will be held down to the production necessary only to fill existing supply lines, as a means of saving material, it is disclosed by an order of PAW.

Under the order, the use of material for the drilling of new wells in the Hugoton field in southwest Kansas and the Oklahoma Panhandle is prohibited, except in the case of wells drilled under specific exceptions granted after September 3, 1942, under the M-68 order. Further exceptions also may be granted to permit the use of materials, but it was indicated they will be issued only where necessary to maintain a capacity load for pipe lines.

The approximately 330 wells now producing in the field are adequate to maintain capacity in all available pipe lines, it was explained by Deputy Administrator Ralph K. Davies.

"Until new natural gas pipe lines are constructed, it will not be in the interest of the war program to use scarce materials for the drilling of wells whose production cannot be made available to consumers because of lack of transportation facilities," he said.

Contract for Arkansas Plant Extended

Execution of a contract expanding the original arrangement with Root Petroleum Company, Shreveport, for plant facilities in Arkansas was announced January 28 by Secretary of Commerce Jesse Jones.

Under the new agreement, the company will provide additional facilities at a cost approximately $980,000, resulting in an over-all commitment of $4,480,000. Title to the facilities will be retained by Defense Plant Corporation.

New Michigan Field To Get Line Outlet

Outlet for the new Aetna field in Missaukee County, Michigan, is to be provided by an 11-mile 6-inch welded line to be built by Leonard Pipe Line Company. Connection is to be made at the company's pump station at Winterfield. Contract for construction work has been let to Gentry Engineering Company of Jackson.

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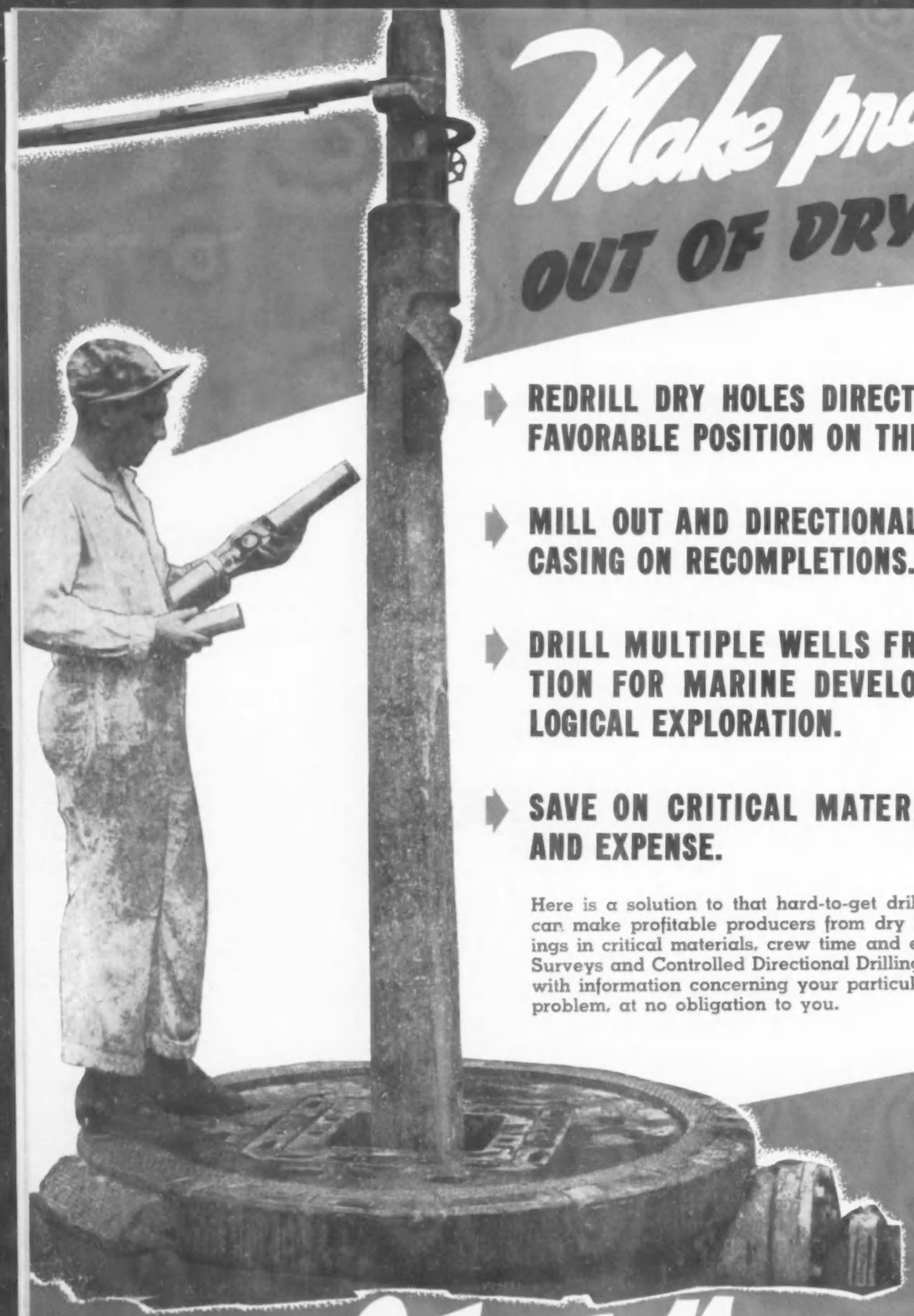

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☆ ☆ ☆ ☆ WASHINGTON ROUNDUP ☆ ☆ ☆ ☆

AN incident-filled week in Washington oil circles brought forth the long awaited—and to the industry, disappointing—report of the Tariff Commission's investigation of crude oil production costs as well as a blast by Rubber Director William M. Jeffers against "Army and Navy loafers" who he said are interfering with his synthetic program.

Other important developments included a promise that rail deliveries to the East Coast would be upped to 900,000 barrels daily within 30 days, and approval by WPB of the 20-inch pipe line to carry light products from Texas to Illinois.

The Tariff Commission report, covering costs only up to September, 1941, gave only a hint of what operators have been trying to impress upon OPA, the increase which occurred during 1942, of which, no study has been made.

Jeffers' outbreak serving to bring the whole rubber-aviation gasoline controversy into the open, precipitated a House investigation of his allegations of interfering rivalry between Army and Navy and, incidentally, brought censure from Elmer Davis, Director of the Office of War Information, who does not consider publicizing of inter-agency conflicts desirable.

Prospects of nation-wide rationing of heating oils before the end of the winter were seen by PAW officials as the OPA extended such rationing to Washington and Oregon, where a 25-percent cut in consumption was ordered.

PAW is preparing to tighten up still further on gasoline deliveries into District 1 by an order barring shipments by barge from District 3 into Western Pennsylvania and West Virginia, complementing last month's order which banned tank car shipments.

WPB Approves 20-inch Product Line from Texas to Indiana

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Jeffers Says Army and Navy Are Interfering with Rubber Plan

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Industrial Fuel Prices Given Advance in Some Areas

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Tariff Commission Study Only Hints at Higher 1942 Costs

»

By B. F. LINZ
Washington Correspondent

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Higher Industrial Fuel Oil Prices Are Granted in Some Areas by OPA

Increases of five to eight percent were allowed in refinery prices for industrial fuel oils produced in the western part of District 2 and the upper part of District 3 are provided for in a new dollar-and-cents amendment to Oil Price Schedule No. 88 issued January 25 by the Office of Price Administration to become effective immediately.

The new schedule was worked out by OPA and PAW with the cooperation of PIWC. The increases will straighten out conditions in New Mexico and certain other areas where ceilings were abnormally low in relation to other sections, but the higher prices are largely offset by the savings in the elimination of costly transportation from Gulf Coast points.

Purposes of the changes, it was explained, were:

To make more industrial fuel oil available in the areas involved by encouraging the blending of low-gravity and the cheaper residual oils with the high-gravity, more costly distillate fuels;

To equalize prices in the several market areas by establishing specific prices, f.o.b. refineries, on a gravity basis rather than on a basis of standard commercial specifications for Nos. 5 and 6 fuel oils;

To meet increasing wartime needs of railroads and industries in the areas involved by augmenting local supplies and eliminating uneconomic transportation of fuel oils from the Gulf Coast ports, which has become a costly practice under previously prevailing prices schedules; and

To release a substantial number of tank cars now used for transporting fuel oil from the Gulf Coast to inland points, for transfer to the eastern service.

"Due primarily to increased railroad and industrial activities, demands for residual fuels in this area now exceed by a wide margin the local production of such fuels," OPA stated. "This deficiency of railroad fuels amounts to 750,000 barrels per month, or about one third of their total consumption. Deficiencies have been supplied by tank car from Gulf Coast refiners at higher costs at points of consumption than the railroads and other consumers will be required to pay under the new price ceilings when obtaining their supplies locally. The cost of this fuel movement spread over the entire volume consumed puts the price to the buyer about 15 cents per barrel above the ceiling of No. 6 fuel oil in the local area.

"The program of PAW calls for increased production in the area in which the new price structure becomes effective. This increased production is to be brought about both by the blending of distillate fuels with heavier fuels and by directing the refineries to change their yields.

"The new ceiling prices permit greater flexibility of refinery operations in these areas inasmuch as refiners can now sell residual and distillate fuels separately or in blends in accordance with wide variations experienced in the relative demands for these fuels, without changing their net realization per barrel of fuel oil. Moreover, the new prices, generally speaking, have the effect both of equalizing the ceiling-price level for analogous grades of residual fuels of the subject area with that of the Gulf Coast and of equalizing the price levels of the different regions within the subject area. Inequalities which would otherwise have resulted from compliance with the program of PAW will be obviated. Kansas refiners, exclusive of those in the Kansas City area, will retain their normal price relationship relative to the Oklahoma refiners."

The order set up three areas: Area A, including Kansas exclusive of refineries located within 25 miles of Kansas City; Area B, comprising Oklahoma, Arkansas, Louisiana (exclusive of Gulf Coast and Mississippi River ports up to and including Baton Rouge), and Texas (excluding Gulf ports and the Panhandle north of the southern boundaries of Palmer, Castro, Swisher, Briscoe, Hall and Childress counties); and Area C, comprising New Mexico and Texas Panhandle excluded from Area B, for which the following prices have been established:

A.P.I. Gravity Range	Area A	Area B	Area C
9.9 and below	$0.85	$0.80	$0.74
10.0-12.9	0.90	0.85	0.85
13.0-16.9	1.02	0.97	0.97
17.0-20.9	1.14	1.09	1.09
21.0-24.9	1.26	1.21	1.21
25.0 and above	1.32	1.27	1.27

In another order, January 26, OPA set up specific maximum prices for Pacific Standard No. 300 and No. 400 fuel oils in California, which, generally, are the prevailing 1941 refinery prices. Resale price levels will not be affected.

Maximum prices of 95 cents per barrel for No. 300 and 85 cents for No. 400, were set for the Los Angeles area, with San Francisco Bay area prices 5 cents higher, all f.o.b. refinery exclusive of taxes.

OPA said that 95 percent of the fuel oils was sold in 1941 at the prices established by the order. Some refineries, representing about 5 percent of the sales, have increased prices, but the volume of sales is not sufficient to outweigh the advantages of the lower maximum, it stated.

WPB Approves 20-Inch Product Pipe Line From Gulf Coast to Indiana

WPB January 26 approved the allocation of materials for construction of a 836-mile 20-inch pipe line from the Beaumont-Houston refining center to Seymour, Indiana. From Little Rock., Arkansas, the line will follow approximately the same route as the big 24-inch pipe line to Norris City, Illinois.

The line will be built by War Emergency Pipe Lines, Inc., the organization that handled the big-inch line.

Ickes has notified WPB he will report in early May as to whether he thinks the new line should be extended 676 miles from Seymour to the New York-Philadelphia area.

The section approved will require an estimated 164,000 tons of steel and pumping equipment capable of generating 55,000 horsepower.

PAW officials said the new $44,000,000 facility will result in a net additional rail delivery to the Eastern Seaboard of 110,000 barrels daily, that figure representing the difference in effective delivery rate that can be secured by shuttling tank cars on the shorter route as compared with the longer run from Texas.

Plans call for the use of seamless steel pipe, but welded pipe will be installed if deliveries of seamless tube cannot be secured in adequate quantity to maintain uninterrupted construction. Eighty-three miles of 16-inch pipe will be laid as a feeder from Houston to Beaumont and 32 miles of 10¾-inch from Port Arthur to Beaumont, 34 miles of second-hand 8⅝-inch pipe will be laid as refinery tie-ins near Baytown and Texas City. To drive the oil through the main line, 44 motors and pumps will be installed in 16 pumping stations.

"The line will link the principal Texas refining area with the most effective Midwest junctions for tank-car transshipments to the East," Deputy Administrator Davies said. "These tank-car-loading terminals, now under construction in Norris City and to be constructed soon at Seymour, will be used for lifting War Emergency Pipe Line deliveries until the extension of that line is completed through to the East Coast next June. They will then be available for similar service in connection with the new products line, pending later determination of the feasibility of extending this line all the way to Eastern terminals.

"We have every reason to believe that the veteran pipe liners who pushed the Texas-Illinois section of the 24-inch pipe line through to completion in record time will be able to duplicate and perhaps better their excellent construction record on this new war job. Many of them are now working on the eastern extension of the 24-inch line, but they will reinforce the crews that will start construction on the second big-inch as fast as they complete their assigned sections of the War Emergency Pipe Line."

Keep Army and Navy Loafers Off and We'll Keep Nation on Rubber—Jeffers

THE immovable William M. Jeffers, President Roosevelt's rubber czar, and the irresistable M. J. Madigan, Administration go-getter extraordinary, are locked in life-and-death battle over materials needed equally urgently for synthetic rubber and aviation gasoline, revelations before the Senate agriculture subcommittee investigating the rubber program reveal.

And in the background lurks the fear that the Germans, staking all on a desperate move, may invoke the use of poison gas and the desire of American military men to be in a position to combat such a move with at least as much and an equally lethal vapor.

The same valves, heat exchangers, control instruments and other materials are needed for the production of all three commodities, Madigan told the subcommittee January 25. To get the aviation gasoline and chemical prógrams in full swing, the special assistant to Undersecretary of War Patterson explained, he has been working to induce Jeffers to slow down his rubber schedule; if his plans are accepted, he said, all proposed plants would be completed this year.

Silently observing the proceedings of the subcommittee, Jeffers had no comment other than that it would take "a higher authority" to overrule him in his plan to push synthetic-rubber production with all possible speed.

Plans of the War Department to prepare for chemical warfare were disclosed by Madigan when Senator Gillette of Iowa, chairman of the subcommittee, asked if the department had considered the possibility of the Axis nations using poison gas.

Madigan said that difficulty in getting priorities for the butadiene plants using petroleum had delayed porgress on their construction. He told the subcommittee that a synthetic-rubber project at Gary, Indiana, on which $3,000,000 was spent, was canceled some months ago because of what he said appeared to be an excessive cost of critical materials.

The Senate investigation took on a new lease of life following a hearing at which Charles L. Gabriel, vice president of Publicker Commercial Alcohol Company, Philadelphia, told of the so-called "Polish" process by which synthetic rubber can be produced at a cost of $139 a ton. Oil-production methods, it was said by Paul Hadlick, committee counsel, cost from $300 to $1200 a ton.

Gabriel said that his company has spent more than $100,000 of its own money in engineering plans for construction of a 20,000-ton pilot plant for which the War Production Board has refused to furnish necessary priorities on materials. However, he said, the company will begin commercial operations next month with a plant capable of turning out 1500 tons of butadiene a year.

The Polish process uses a mixture of corn and wheat to obtain alcohol from which butadiene is made. About 200,000,000 bushels of grain are needed to produce 600,000 tons of synthetic rubber.

Gabriel agreed with a suggestion of Senator Wheeler of Montana that possibly the government has not apporved large-scale production by his process because it "looks too permanent." High Administration officials, headed by Vice President Wallace, have expressed the view that synthetic rubber production should be halted after the war so as not to wipe out the market for natural rubber on which the prosperity of British Malaya and the Dutch East Indies depends.

Meanwhile, a government report disclosed that guayule rubber production has reached the point where it will provide 600 tons this winter, the first natural rubber produced in this country since the beginning of the war.

The production will come in two years ahead of schedule under a plan to harvest the shrub at the end of two years of growing instead of four years. Under this system the output will be stepped up 21,000 tons in 1944 and 80,000 tons in 1945.

At best, however, guayule rubber will meet only an infinitesimal part of our over-all need for rubber, placed at more than 700,000 tons.

Jeffers Speaks

If Jeffers was silent in Washington, he was so vocal in Baltimore as to bring howls of anguish from the Office of War Information, where Director Elmer Davis is supposed to get all inter-agency controversies ironed out in the bosom of the family and at all costs prevent them from reaching the public.

Jeffers talked—and plenty—at a round-table conference of the Council of State Governments. The biggest monkey wrench in the works, he said, is the plethora of "experts" in Washington and "expediters" in plants and the rivalry between "stars and bars."

"We read in the papers that 55 percent of the rubber program is going to be authorized and that the Navy says if they don't get the materials for their escort vessels for convoys that we'll have to fight the war on the Mississippi," he said.

"Fifty-five percent of what? My job is to get some rubber plants built and in operation. We're trying to do in a year what would take ten years or more in peacetime. It can be done and is going to be done although I don't know just how.

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rubber in Washington, just as we have too many experts in a lot of things. We are interested in keeping our civilian economy running, so let's have a little more practical thinking as to just what the problem is.

"Of course, it's true that we need more 100-octane gas and more escort vessels, but I say we can get them all and still build the rubber plants we need, if we'll get production in this country up where it ought to be."

That will not require more men in the plants, he said, but it does mean "more production and less interference."

"We've got too many so-called expeditors in these big plants—Army and Navy commissioned officers," he declared. "One day it's the Army and the next day it's the Navy, and seemingly it's a battle between how many stars and how many bars are most important.

"If we can keep the Army and Navy loafers out and let the men in charge run the plants, we'll get the production we need out of them, and we will be able to keep the country on rubber."

Jeffers' charges created something of a sensation in Washington, and Representative Carl Vinson of Georgia, chairman of the House Naval Affairs Committee, ordered an immediate investigation.

"This is a serious accusation and we should have an inquiry to give Mr. Jeffers an opportunity to prove the correctness of his statement," Vinson said. "We should also hear from Army and Navy officials."

At the last hearing before the Senate agriculture subcommittee, which may shortly introduce legislation to deal with the rubber situation, WPB Chairman Donald M. Nelson on January 26 declared that 55 percent of Jeffers' rubber program will be carried through this year.

Nelson said Jeffers had issued a directive to that effect, which has a superpriority status. But, he disclosed, the Army and Navy never have approved of the move which, he admitted, will be at the expense of some other phases of the war program.

The 55-percent program, he figured, would give us a capacity of 500,000 tons of synthetic rubber annually by the end of 1943, but that will be sufficient only for military, lend-lease and essential transportation needs.

The WPB head said there are five major programs in conflict with each other—rubber, aviation gasoline, escort vessels, planes and merchant ships. Heat exchangers and converters are the items most in demand, but there are other materials for which all programs are competing.

He said the aviation-gasoline program is lagging and, in addition, there is a need for better gasoline; that situation is "very urgent."

Nelson assured the subcommittee that all of the needs can eventually be met. Primarily, it is a matter of deciding which is most important at the moment and concentrating on that, but an effort is being made to mesh all programs together.

The fact that only 55 percent of the original program is to be prosecuted now, he said, does not mean that the remaining 45 percent will be scrapped. The whole program will be completed but additional parts of it will be authorized as opportunity occurs.

With agency officials unable to agree on a program the priorities problem was taken to the White House where, in the absence of President Roosevelt, Stabilization Director James F. Byrnes' decision was said to have given Jeffers top priorities for approximately 43.5 percent of his program, instead of the 55 percent on which he had insisted, but with plants already completed or which are being consturcted without priorities and with an expected excess of actual over rated capacity, it is believed to be near 50 percent. Plants for which Jeffers is to get priorities will have a capacity of 210,000 tons a year and will bring synthetic rubber production to 450,000 tons annually.

Navy Frowns Upon Use Of Concrete Pipe Lines

Construction of concrete pipe lines to increase supplies on the East Coast, proposed by Congressman Curley of Massachusetts, is frowned upon by the navy, which itself has experimented with concrete conduits.

In a report to Senator Walsh of Massachusetts, the department pointed out that the bottleneck in steel pipe line construction is is not in the tubing but in pumping equipment and that steel pipe for other purposes is decreasing and no great trouble anticipated in obtaining such pipe as may be needed for oil lines. Concrete has the disadvantage of being able to stand only about one fifth the pressure employed in steel pipe, requiring about twice as many pumping stations and pumps, while if reinforced concrete is used almost as much steel is required as for metal lines.

On the basis of navy experience, officials are convinced that the use of concrete is not practicable, the senator was told, and any attempt to use concrete instead of steel piping would delay the pipe line program by throwing a still heavier burden on the manufacturers of pumps and pumping equipment.

At the same time, Walsh was advised by Under Secretary of the Navy James Forrestal that the department long ago foresaw the present Eastern shortage and for several months has been cooperating with PAW in an effort to avert a crisis.

To this end, Forrestal said, the Navy Department has been and will continue, sharing its stocks of oil with the civil authorities to the greatest extent possible without jeopardizing the flow to our forces at sea and over seas.

Herbert Gallagher Heads Disrict 5 PAW Office

Appointment of Herbert R. Gallagher, president of the Consolidated Oil Corporation, New York, prior to his retirement from business in 1940, as director in charge of the District 5 PAW office was announced January 29 by Deputy Administrator Davies. Gallagher has had long experience in the industry, having been senior vice president of the Shell Oil Company in California from 1911 to 1932. He served as chairman of the general committee of Region 1 under the NRA and was a member of the Petroleum War Service Board during the last war.

DeGolyer Paints Gloomy Picture of Oil Outlook

Rationing of fuel oil for home consumption has been extended to Washington and Oregon, as a result of heavy and increasing military demands, and the remainder of the country shortly may find itself also under restrictions, it was disclosed January 26 by Everett L. DeGolyer, assistant deputy petroleum administrator.

The West Coast rationing, decided upon at a conference between Deputy Coordinator Davies, Deputy Price Administrator John Hamm, Joel Dean, in charge of rationing for the OPA, and Army and Navy representatives, will entail a 25-percent cut in consumption in the two states.

The warning that the entire country may be put under fuel-oil rationing was issued by DeGolyer, speaking before the Council of State Governments in Baltimore, who asserted that our oil production has nearly reached capacity and now is only slightly above the needs of the country.

The situation on the West Coast, he said, will become worse because military demands there make it impossible to guarantee continued use of the tankers now serving that area.

Because of the heavy demand for other products, there is no hope of relief in the gasoline situation in the near future, he told the council.

DeGolyer painted a gloomy picture of the whole oil situation, predicting that the United States is not likely ever again to be an oil exporter but has reached the stage where it will be necessary to import oil in coming years.

Increasing military requirements will place "real pressure" on the nation's productive capacity before the end of this year. How heavy that pressure will be, he said, will depend on the result of efforts now being made to increase by 50 percent the number of wildcat wells to be drilled in 1943.

Ban Against Hugoton Drilling Includes Wildcats

The order recently issued by PAW eliminating drilling development in the Hugoton gas area of southwest Kansas and the Panhandle area of Oklahoma also applies to those areas so adjacent to the field that drilling might be semi-wildcat within the probable but unproved productive area of the field. This was determined as result of an effort to expand the Oklahoma sector of the field by new drilling, none of which is to be permitted, according to the interpretation of the rule.

It is held by PAW that primary consideration is that such drilling would require earmarking critical materials for the development without adding to the gas being made available to consumers, now supplied by lines operating at or near capacity with available field volumes still in excess of line capacity. On the basis of materials economy, there is no reason to add to present reserves where 22 wells in Kansas and others in Oklahoma are without connection. Cities Service Gas Company has formally requested materials for an additional outlet from the Hugoton area but the request has not received favorable action.

Tariff Commission Says Costs Lower in 1941; Only Hints at 1942 Rise

ANY increases in the ceiling prices of crude oil granted by the Office of Price Administration in three of the five producing areas of the country will have to be based upon 1942 developments rather than on 1940-41 trends, it was disclosed by the results of intensive investigations by the Tariff Commission January 27.

Making public a 248-page report prepared for OPA, the commission showed that the average net cost of producing crude increased in Illinois and the Eastern area between 1939 and the third quarter of 1941, but decreased in the Mid-Continent-Gulf and Rocky Mountain areas, and California.

Commission officials admitted that on its face the report might prove disappointing to oil operators, but pointed out that a check study of conditions in the second quarter of 1942 indicated that costs were on the uptrend last year in all sections of the country.

That study covered the operations of the 60 largest companies in a group of 20 pools or fields located throughout the country and selected as representative of production in the different states.

"Many of the details of the results of this supplemental investigation have not yet been fully tabulated," the report stated. "It is sufficient to say in this summary that the average costs of production in the second quarter of 1942 were found to be somewhat higher than the costs in the third quarter in 1941, which in turn were only slightly higher than average costs in 1940. For the country as a whole the costs of the 60 concerns covered by the preliminary tabulation of the supplemental investigation averaged 74 cents per barrel in the third quarter of 1941 and 81.5 cents in the second quarter of 1942, an increase of 7.5 cents per barrel, or about 10 percent. Company-interest production of these concerns declined from 169.7 million barrels in the third quarter of 1941 to 159 million barrels in the second quarter of 1942, a decrease of 10.7 million barrels, or about 6.3 percent."

Cost Increases

In the 20 selected areas, costs of production increased by from 0.7 to as much as 15.5 cents per barrel in 14, due primarily to decreases in production, with higher wage rates and higher prices for materials and supplies also contributing factors; while in 6 other pools costs decreased by from 0.3 to 8.6 cents per barrel, due primarily to increases in volume of output.

"It is a general impression in the oil industry that the costs of exploration and of bringing into production new wells have increased even more (in percentage) in 1942 as compared with 1941 than the average costs of production of all oil have increased," it was commented. "The supplemental investigation of the commission could not, in the nature of things, bring out changes which may have occurred in the costs of exploration and of developing new wells but it is known, however, that wage rates and prices of equipment have risen."

The findings of the commission, developed by Kenneth L. Stone and members of its staff, were based on usable data obtained from 2534 producers, who accounted for about 70 percent of the total crude oil output of the country in 1940, and in a brief note appreciation was expressed of the cooperation given by the industry in furnishing the comprehensive data on which the report was based.

While the cost trend varied as between major areas, the commission found a general increase in the value of the oil at the well, except in California, and in the margin between net cost and value, which the report summarized as follows:

Value Increases

"From 1939 to the third quarter of 1941, the average value per barrel at the well increased about 30 cents in Illinois and 55 cents in the Eastern area; the percentages of increase were 12.9 and 13.8, respectively. The average value per barrel increased about 16 cents (11.6 percent) in the Mid-Continent-Gulf area and 13 cents (11.5 percent) in the Rocky Mountain area; it decreased about 1 cent (1.2 percent) in California. The average net cost per barrel at the well increased about 15 cents in Illinois and the Eastern area; the percentage of increase was 13.2 percent in Illinois and 11.2 percent in the Eastern area. Average net cost decreased about 2.5 cents (3 percent) in the Mid-Continent-Gulf area, 16 cents (25.2 percent) in the Rocky Mountain area, and 3 cents (4.9 percent) in California. During the period under consideration, the margin per barrel at the well increased in each of the above regions. The amounts and percentages of increase were as follows: Illinois, 15 cents and 26 percent; Eastern area, 39 cents and 281.4 percent; Mid-Continent-Gulf area, 19 cents and 129.2 percent; Rocky Mountain area, 29 cents and 127.6 percent; and California, 2 cents and 4.3 percent."

The commission explained that after the outbreak of the war in Europe, there were continually rising demands for those types of crude which yield relatively large quantities of high-grade lubricants, a factor primarily responsible for the rise shown in each of the later periods in the average value per barrel at the well in the Eastern region, but in other regions no substantial increases occurred until after 1940, when the increased war demand for fuel oil and gasoline began to be a factor affecting crude prices. Prices in California, it said, were somewhat lower in 1940 and 1941 than in 1939, chiefly because of its isolated geographical position in respect to important Eastern markets and the decline in exports from that state, as a result of restrictions in trade with Japan and other factors. Prices declined in California through the first quarter of 1941, but subsequently increased, principally as a result of increased demand for military and industrial purposes.

The declining average net cost per barrel at the well in 1941 for California and the Rocky Mountain and Mid-Continent-Gulf regions, as compared with 1939 and 1940, reflected the somewhat larger volume of production, while the increase in average net cost in Illinois and the Eastern area was attributed mainly to the decline in volume of production which occurred in those regions in 1941.

Illinois-Eastern States

"In Illinois," the report commented, "the major increase in value per barrel occurred after 1940 and may be attributed partly to the smaller output in 1941 as compared with 1940 and partly to the increase in demand for petroleum products in nearby industrial centers. The decrease in output was due chiefly to the transition from flush to semi-flush production in the newer fields of the state. Prior to 1941, uncontrolled flush production in Illinois tended to depress crude-petroleum prices in the Mid-Continent-Gulf and Rocky Mountain regions. In addition to the war, recognition by the industry that production in Illinois had passed its peak probably was a factor causing higher prices in these other two regions in 1941, especially in the Mid-Continent-Gulf region.

"Pennsylvania, New York, West Virginia, and Ohio account for about half of the crude-oil output in the Eastern region. In these states, the chief factor influencing the price of crude-oil is the price of lubricants; this is a local condition having little effect on crude-oil prices in the other regions covered by this study. In 1939 exports of lubricants increased substantially, especially in the second half of the year. This increase in exports resulted in a sharp decline in stocks, and with the outbreak of the war in September there was an immediate increase in prices of lubricants, especially those made from Pennsylvania-grade crude oil. Although prices of Pennsylvania lubricants decreased somewhat in the first half of 1940, the average for the year was somewhat higher than the average for 1939. Prices rose in 1941, and the average for that year exceeded the 1939 average by a substantial margin. Late in 1940 and in 1941, there was also an increase in the demand for lubricants for industrial purposes in this country, largely as a result of the war program, which also contributed to more stable prices.

"Partly because of the more or less isolated position of California, the aver-

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age of crude-petroleum prices as a whole in that state did not change materially in the periods covered by this investigation. Much of the crude-petroleum output in California consists of heavier grades which yield chiefly fuel oil or asphalt; little of it is used in the manufacture of lubricants. As a rule, exports of crude petroleum and petroleum products are relatively much more important in that state than in the other producing regions. Exports to Japan, the principal foreign market for California petroleum, decreased materially after 1939."

Regional Prices

Differences in price levels in the various areas were found to be due to a number of factors. The high level of unit values in the Eastern area was attributed to the fact that it is a deficit area, producing only a relatively small part of total output of the country; transportation costs to principal centers of consumption are low compared with those costs from other areas, and oil produced in the area has a long-established reputation for high quality. The oil fields in Illinois are near important centers of consumption, but the Illinois oil does not have the reputation of that produced in the Eastern area. The Mid-Continent-Gulf area is farther from consuming centers than Illinois. Transportation facilities of the Rocky Mountain area are limited, and it is relatively inaccessible to large centers of consumption.

"Changes in net cost per barrel in the periods covered by this investigation may be attributed largely to fluctuations in the volume of production, which are reflected chiefly in variations in operating costs and general and administrative expenses," the commission explained. "The increases in net cost per barrel in Illinois and the Eastern region in 1941 compared with 1939 were due chiefly to the much smaller output, and the decreases in the Mid-Continent-Gulf and Rocky Mountain regions resulted almost entirely from the larger output in 1941.

"Differences in cost levels as between areas are due to a number of factors. The principal cause of the high level of costs in the Eastern area, where stripper wells predominate, is the small daily average output of wells in that area. Moreover, the quality of the oil justifies operations at high costs. The low level of costs in Illinois may be attributed largely to the fact that production is flush or semi-flush and not restricted by proration; moreover, drilling costs are comparatively low. In the Mid-Continent-Gulf area, the principal factors tending to make costs higher than in Illinois are proration restrictions on production, the drilling of an excessive number of wells in certain producing fields, and to some extent production from stripper wells. Primarily the low costs in the Rocky Mountain area are the result of the large daily output per well. In California, the total cost per barrel of oil produced is higher than in the Rocky Mountain area largely due to the fact that (1) the cost of drilling and equipping wells is higher per well because of their greater average depth and (2) more wells have been drilled per developed acre than in the Rocky Mountain region. A substantial part of the total cost per barrel in Cali-

fornia is offset by income from sales of gas."

Costs and Prices Vary

The commission found that net costs and average prices at the well, and average margins differ widely for individual pools within each region.

"Average net costs for the first nine months of 1941 for fields in California ranged from 32 cents per barrel for the Kettleman North Dome field to $1.87 for the Torrance pool; the average for the state was 60 cents," it reported. "In the Kettleman North Dome field, a considerable part of the total costs of recovery was offset by large credits for the sale of gas; these credits were equivalent to about 60 percent of the total cost in January to September, 1941. Average daily gross production per well in the Torrance pool was about 13 barrels compared with 142 barrels for the Kettleman North Dome field and 40 barrels for the state. The average of posted field prices for fields within the state ranged from 51 cents for the Santa Maria Valley pool, where heavy crude oil is produced, to $1.27 for the Kettleman North Dome field, where much lighter oil is produced. The average margin per barrel for the state was 39 cents; for pools or fields within the state the margin ranged from a 'loss' of $1.05 for the Torrance pool to a 'profit' of 95 cents for the Kettleman North Dome field.

Texas Low-Cost Pools

"In Texas the low-cost pools were White Point, Cayuga, Talco, and Thompson, all of which had average net costs of less than 60 cents per barrel. The high-cost pools were Rodessa and Dickinson, for which average costs were $1.32 and $1.29, respectively. Average prices for pools in Texas ranged from 74 cents for the Talco pool, where heavy oil is produced, to $1.38 for the White Point pool, where lighter oil is produced. Margins in the state ranged from a 'loss' of 19 cents per barrel for the Rodessa pool to 84 cents 'profit' for the White Point pool; the average margin for the state was 32 cents.

"In Oklahoma the lowest average net cost was 51 cents for the Ramsey pool, where the daily output per well is high. The highest was $1.92 for the Fitts pool, where secondary methods of production are used and the daily output per well is low. The average for the state was 92 cents. Margins ranged from a 'loss' of 80 cents for the Fitts pool to a 'profit' of 68 cents for the Ramsey pool.

"Costs for the Bradford pool in Pennsylvania, where water-flood or water-drive is generally practiced, are much lower than those in other parts of the state. The advantage of this method of production may be judged by the fact that daily production per well was much larger than for wells in other parts of Pennsylvania. Net costs per barrel in January to September, 1941, averaged $1.82 in the Bradford pool compared with $2.60 in the Kane-Butler district and $2.20 in Southwestern Pennsylvania. Average prices in this period ranged from $2.24 per barrel in Southwestern Pennsylvania to $2.49 for the Kane-Butler district and $2.50 for the Bradford pool. Margins ranged from a 'loss' of 11 cents per barrel in the Kane-Butler district to a 'profit' of 68 cents for the Bradford pool."

Washington representatives of the industry expressed disappointment with the report, declaring it unfair to end at

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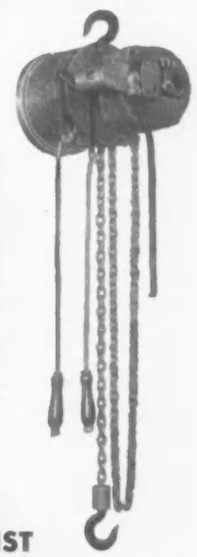

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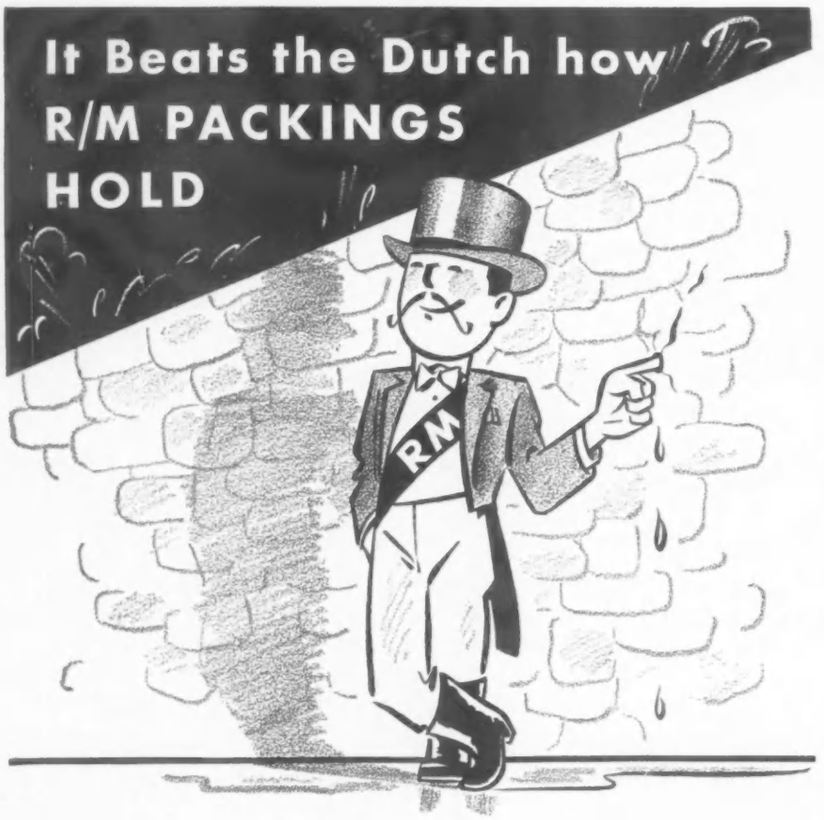

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September 30, 1941, a survey of costs designed to show the situation in January, 1943.

They also charged that a number of items essential to cost studies were omitted in the report, including interest, which they declared should have been included since most oil producers borrow money from time to time.

Eastern Tank Car Deliveries Drop

Tank car deliveries during the week ended January 23 averaged 798,552 barrels daily, a drop of 19,779 barrels from the previous week, but the situation was "neither better nor worse than we anticipate," according to the weekly PAW situation report.

During the week, tank car deliveries into New England dropped 13,900 barrels a day but shipments of kerosine in drums increased 3265 barrels daily. A full stream of gasoline started flowing from the new Ohio Emergency Link pipe line into the Susequenna pipe line at Randolph, Ohio, releasing cars, and barge movements continued at a high level.

"The overall East Coast situation is not good, but it is not deteriorating," Davies commented. "Next six weeks will be a very critical period, however, and we are not neglecting opportunities to improve the situation."

Emergency Link Pipe Line Across Ohio Completed

Completion of the 82-mile 8-inch pipe line, costing approximately $1,400,000, to carry gasoline from Fostoria to Akron, Ohio, was announced by Secretary of Commerce Jones January 28. The project, sponsored by PAW, was financed and is owned by Defense Plant Corporation.

The line will be operated by Ohio Emergency Pipe Line Company, owned by Standard Oil Company of Ohio, Sun Oil Company and Shell Oil Company as a connecting link between pipe lines heretofore in existence owned by Standard Oil Company of Ohio and Sun-Susquehanna Products Company.

Construction was started in August, 1942, and the line went into complete operation January 23, 1943—six months later.

Florida Line Ready To Operate This Week

Initial shipment of products through Defense Plant Corporation's 202-mile 8-inch line from Carrabelle across northern Florida to Jacksonville, is scheduled for late this week. Trans Florida Pipe Line Company, that has contract for the installation and operation of the project, will displace the water used for testing the line, which is rated at 30,000 to 35,000 barrels daily, depending upon the products handled, with 25,000 barrels of gas oil followed by 75,000 barrels of gasoline. The Carrabelle terminal has 300,000 barrels of tankage, while an equal volume is available at Jacksonville, where lease has been taken on Shell Oil Company's terminal.

ABE M. LLOYD, geologist for Sun Oil Company, Dallas, was guest speaker January 25 of the Fort Worth Geological Society. He talked on the "Jurassic of Southern Arkansas and Louisiana."

"Big Company" Lawyers File Brief in Salt Water Suit

Trial of the suit involving the Texas Railroad Commission's water-oil ratio order for the East Texas field has been recessed until February 8. The delay was granted by the court upon the request of Fred Weeks, attorney for the plaintiffs.

On the stand at the time of the recess was Commissioner Ernest O. Thompson, the last witness the state planned to introduce. However, these plans may be altered after the hearing is resumed.

Black, Graves and Stayton, Austin oil attorneys, filed an amicus curiae brief in the case supporting the commission order. This firm has represented major oil companies for the past 10 years in nearly every important case in Texas involving principles of oil law. For that reason the brief may be of unusual importance in this case.

"The challenged order of the commission," the brief concludes, "does not violate the marginal-well law. Plaintiff's contentions are based on a misconstruction of that law and on a misconstruction of the order. The order is a valid exercise of the commission's undoubted power to prevent waste of oil and gas and, for that purpose, to prescribe non-wasteful methods of producing oil and gas from all wells."

Texas House Selects Committee on Oil, Gas

John C. Hoyo of San Antonio, has been named chairman of the Texas House Committee of Oil, Gas and Mining. The first meeting of the committee was held Monday, February 1.

The membership includes Hoyo, chairman; Lester Clark, vice chairman; Richard Craig of Miami; Ennis Favors of Pampa; L. H. Flewellyn of Ranger; James H. Goodman of Midland; Edgar Hutchins of Greenville; DeWitt Kinard of Port Arthur; Fred V. Klingeman of Karnes City; Charles Lansberry of Round Rock; E. H. Lasseter of Henderson; G. H. Little of Amarillo; C. M. McFarland of Wichita Falls; Carlton Moore of Houston; M. B. Morgan of Denison; C. E. Nicholson of Port Neches; Jack Overton of Palestine; R. C. Parker of Graham; Jimmy Phillips of Angleton; Harley Sadler of Sweetwater; and Burke T. Summers of Big Spring.

Allowable Transfers Sought in Texas Fields

Humble Oil & Refining Company has requested permission to transfer allowables of high gas-oil ratio wells in 13 Texas Gulf Coast fields. At a hearing before the Texas Railroad Commission last week, the company asked that it be allowed to close in these high gas-oil ratio wells and transfer the oil allowables to other wells on the same lease.

The plan proposed would apply to the following fields: Lolita, Maubro, West Ranch, Thompson, Magnet, Dickinson, Hastings, Gillock, South Cotton Lake, Hardin, Amelia, Lovell's Lake, and Anahuac.

S. F. Holmesly, petroleum engineer for Humble, testified that the company would be able to save about 4,000,000 cubic feet of gas daily.

An unusual feature of the hearing was a statement by the Atlantic Refining Company, contending that the transfer of allowables from high water-oil ratio wells involved the same principle as that urged by Humble in transferring allowables of high gas-oil ratio wells. John W. Stayton, attorney for Atlantic Refining Company, said that the company did not request an order of that type for the fields operated by Humble, but that it planned to make such a request in the near future for some other field.

Testimony was presented to show the similarity between the two types of ratios. This is the first time that any company has raised the question at a commission hearing, but Stayton pointed out that the commission had recognized this principle in its orders in East Texas.

Bill Would Permit Lease Unitization

Plans have been announced to introduce a bill in the Texas Legislature which would permit voluntary unitization of leases in Texas. Representative Lester Clark of Breckenridge, said last week that he and Obel McAlister of Fort Worth, would introduce the measure.

Another bill introduced by Representative Williamson of San Antonio, would abolish the gasoline tax refund on gasoline used in planes and motorboats. It is possible this bill will be amended to eliminate all refunds, most of which go to farmers.

Representative Ennis Favors of Pampa, has introduced a bill providing for the proration of condensate under a market demand act. Unlike a condensate proration bill which was introduced earlier in the session, the new bill defines the product as, "any liquid petroleum product obtained by condensation from natural gas after such gas leaves its natural reservoir."

The bill declares waste if the production exceeds transportation or market facilities or the reasonable market demand.

It provides in part: "Section 3. In determining the reasonable market demand for condensate, the commission shall consider the reasonable market demand for condensate in relation to the market demand for crude petroleum oil, and if the commission finds that condensate or any products of condensate compete in the market with crude petroleum oil or any products of crude petroleum oil, the commission shall be authorized by rule, regulation, or order to restrict the total production of crude petroleum oil and condensate to the reasonable market demand. In the event that any such rule, regulation, or order, which the commission may adopt, provides for the limitation or fixing of the production of condensate or crude petroleum oil or both, the commission shall distribute, prorate, or otherwise apportion or allocate the allowable production among the various producers of crude petroleum oil or condensate or both on a reasonable basis."

Texas Hearing Scheduled At Fort Worth, February 18

The Texas Railroad Commission has announced that its next statewide proration hearing will be held in Fort Worth, February 18, at the Blackstone Hotel. This is the second hearing away from Austin, and it is expected the hearing for March will be scheduled for Houston.

Phillips and Sunray Buy Broderick & Calvert Stock

West Texas producing properties of Broderick & Calvert, Inc., Fort Worth, headed by George Calvert, have been acquired through a joint purchase of the capital stock by Phillips Petroleum Company and Sunray Oil Company for approximately $4,500,000. Sunray Oil Company is subscribing 25 percent of the stock. The deal is effective February 1, and involves 2840 acres of producing leases with 101 pumping and flowing wells in the Harper, South Cowden, Foster and North Cowden fields, Ector County, 4500 acres of wildcat leases in Andrews and Ector counties, and about 800 acres near the Barron deep distillate pool in Limestone County, East Texas.

Extensive royalty holdings and other wildcat acreage held jointly by Calvert and the A. J. Broderick estate were excluded from the deal. The producing wells have a rated potential of 123,389 barrels, with a base allowable of 1253 barrels daily.

Broderick & Calvert drilled the discovery well for the Harper field in 1933.

California Seeks Price Hike, Relaxed Restrictions

Warning that something be done about its problems, the California Oil and Gas Association has appealed to Washington for help in the form of higher prices and relaxed restrictions. The association, which represents more than 90 percent of the state's petroleum industry, pointed out that the state's oil plight might develop into one of national concern.

The association, in a resolution transmitted to R. K. Davies, deputy coordinator, cites critical war necessity of increasing the state's heavy oil production, and sets forth the often reiterated statement that this can be brought about only by government help. It may be accomplished, the association asserts, by (a) intensive exploration and drilling (b) rehabilitation and repair of old wells, decrease in abandonment of marginal wells and renewed production from shut-in wells not now profitable, and (c) rapid development of present proven reserves. To bring this about, it is represented, will require adequately increased prices (50 cents on heavy crude with compensating 68 cents a barrel rise in fuel, diesel oil and asphalt prices), assurance of retention of percentage depletion allowance and option to expense intangible development and drilling costs; lifting of restrictions upon present use of materials; provision of materials and equipment in whatever extent required, and maintenance and augmentation of manpower.

Kansas February Allowable Near State's Capacity

Kansas Corporation Commission has indicated a state allowable of 310,500 barrels, including 5000 barrels of distillates and other high gravity raw products, as the February allowable, equivalent to the figure named by OPA. Consideration was given the state demand, which was acknowledged as a new top at 340,474 barre'ls daily, but in view of current withdrawals being near maximum, particularly as regards transportation, there was no attempt to meet actual demand.

Production Committee in District 2 Concerned About Production Decline

The District 2 Production Committee of the Petroleum Industry Committee at its January meeting, had under consideration a number of items of interest to oil producers throughout the district, which is composed of 15 mid-western states, according to a statement issued by O. D. Donnell, chairman of the committee.

The organization meeting of the subcommittee on Joint Use of Facilities which met one month previous was reported by F. O. Prior, chairman of the subcommittee, who stressed in his report the necessity of reclaiming material from production facilities in order to save as many vital materials as possible to be reused in production operations. The subcommittee's report also stressed the importance of the manpower shortage in the industry, many experienced and highly skilled workmen having left the industry either for war plants or for the armed forces. The Joint Use of Facilities Subcommittee, in addition to Prior, is composed of the following members: J. A. Aylward, Wichita, Kansas; W. B. Emery, The Ohio Oil Company, Findlay, Ohio; H. B. Fell, Simpson-Fell Oil Company, Ardmore, Oklahoma; R. B. Kelly, The Pure Oil Company, Chicago; H. M. McClure, Alma, Michigan; H. N. Pardee, The Texas Company, Tulsa; O. C. Schorp, The Carter Oil Company, Tulsa, and H. N. Stalcup, Skelly Oil Company, Tulsa.

Engineering and Well Spacing Subcommittees will shortly be appointed in the producing states in District 2, the chairman stated, for the purpose of revising to include current developments an estimate of wells, production and reserves made by similar subcommittees last year. The continuing decline in the rate of production in the district was the subject of considerable discussion, it being the opinion of the members of the committee that this decrease in production is very alarming, particularly in view of present indications that Army and Navy demands will increase rather than decrease as the war progresses.

The Engineering and Well Spacing Subcommittees will also make a study of their respective states in an attempt to determine those pools where exceptions to Conservation Order M-68 would, in their opinion, be of benefit in increasing production in conformity with recognized conservation practices. These findings will then be transmitted to the various state regulatory bodies for their information and use.

The chairman reported to the committee on the January meeting of the Committee on Production of the Petroleum Industry War Council, at which meeting it was announced that Unemployment Compensation Letter No. 12, which had required reporting of employment on a county basis, had been revised to permit reporting for social security purposes by the oil industry on the basis of the division or district out of which the employes work. The lifting of this restriction was accomplished by the efforts of the Petroleum Administration for War in response to the recommendation of the District 2 Production Committee made last October.

Donnell also announced appointment of a special study committee on Substitutions and Operating Practices, which committee will make a survey of specific problems in an effort to determine where non-critical materials can be substituted for critical materials without a decrease in efficiency of operations. The special study committee has the following personnel: Ivan S. Salnikov, The Carter Oil Company, Tulsa, chairman; R. G. Ayers, Bethlehem Supply Company, Tulsa; C. W. Oleson, Stanolind Oil & Gas Company, Tulsa; H. E. Schafer, The Pure Oil Company, Tulsa; and David G. Hawthorn, Division of Production, Petroleum Administration for War, Washington. Projects presently assigned to the committee are: reduction in the amount of steel used in oil-well pumping units, elimination of unnecessary casing strings used in drilling oil wells, and practicability of the use of fiber pipe.

One of the first conclusions reached by the District 2 Production Committee after its appointment was the need for an acceleration in exploration and wildcatting to assure a continued adequate supply of petroleum during this war period, and it has recognized that crude-oil prices have a definite bearing on the rate of wildcat operations. For many months it has advocated a higher price, not only from the standpoint of offsetting increased development and operating costs but as an incentive in stimulating exploratory work. H. B. Fell, vice chairman of the committee, reported on a series of studies which are being undertaken jointly by the committee on Cost and Price Adjustment and the committee on Petroleum Economics of the Petroleum Industry War Council at the request of the Council to secure factual data to substantiate the industry's repeated applications to the Office of Price Administration for an increase in the price of crude. The District 2 Production Committee recognizes the importance of these studies which are being undertaken on a national basis, and strongly recommends that the operators in District 2, when called upon by the committees making these studies to do so, lend their fullest cooperation and assistance.

Maximum Price Regulation No. 230 was also the subject of consideration by the committee. This regulation freezes the price of reusable iron and steel pipe, and because of the hardship imposed by it the sale of such pipe between operators has practically ceased. It was the view of the committee that because of the scarcity of materials and the necessity of increasing drilling in order to develop new reserves and furnish oil for our fighting forces, war industries and essential civilian needs, this restriction should be lifted so as to permit the freer movement of reusable pipe between members of the industry.

The committee will meet again during the early part of February, at which time the chairman stated it will consider further subcommittee reports and such problems as are referred to it.

The membership of the District 2 Production Committee is composed of O. D. Donnell, chairman, The Ohio Oil Company, Findlay, Ohio; K. S. Adams, Phillips Petroleum Company, Bartlesville, Oklahoma; H. B. Fell, Simpson-Fell Oil Company, Ardmore, Oklahoma; C. C. Herndon, Skelly Oil Company, Tulsa, Oklahoma; A. U. McCandless, Mahutska Oil Company, Robinson, Illinois; H. M. McClure, Alma, Michigan; L. F. McCollum, The Carter Oil Company, Tulsa; H. N. Pardee, The Texas Company, Tulsa; R. J. Pryor, Pryor & Lockhart, Wichita, Kansas; A. S. Ritchie, D. R. M. Company, Wichita; C. T. Smith, Flora, Illinois; and E. D. Wallace, The Standard Oil Company of Ohio, Lexington, Kentucky.

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Stocks of Fuel Oils Reduced Sharply But Much Gasoline Goes to Tanks

Previous unfavorable trends were continued in the week ended January 23 when the industry was obliged again to draw very heavily on stocks of light fuel oils and also to take from storage a substantial amount of heavy fuel oil. In the meantime, gasoline stocks increased by more than 2 million barrels for the week, which was a greater accumulation than indicated as necessary, under the present lower trend of consumption of that product.

Responsible for the failure to supply enough fuel oils was a further reduction in crude runs to stills, aside from the continued relatively heavy yields of gasoline at the refineries and inadequate yields of fuel oils. United States stocks of gas-oil and distillates were reduced from 39,841,000 to 38,034,000 barrels during the week, a decrease of 1,807,000, compared with 1,526,000 the previous week. The new total was 4,273,000 barrels, or 10 percent, under the 42,307,000 on hand January 24, 1942. Meanwhile, potential demand for the light fuel oils is materially greater than a year ago, indicating that present consumption must continue substantially curtailed.

The withdrawals of light fuel oils from storage occurred principally in the East Coast-Southwest districts and the Middle West, in reflection of the heavy consumption now under way in the northern states. California also took out 66,000 barrels.

Residual fuel oil stocks were reduced 301,000 barrels during the week, having declined to 71,216,000 barrels. In the previous week there had been a withdrawal of 761,000 barrels. The new total of 71,216,000 barrels was approximately 19,500,000 barrels, or 21.5 percent, under the 90,764,000 barrels on hand January 24 a year ago. As in the case of the light fuel oils, the reductions in heavy fuel stocks occurred principally in the East Coast-Southwest regions, reflecting continued difficulty in supplying Eastern industries.

United States stocks of finished and unfinished gasoline were increased from 84,955,000 to 87,102,000 barrels, a gain of over 2,000,000 barrels for the week. Present stocks are 12,000,000 barrels, or 12 percent, under those of a year ago.

Crude runs to stills averaged 3,615,000 barrels per day in the week of January 23, down 25,000 from the previous week and 259,000 barrels (6.6 percent) under the runs in the corresponding week of a year ago. The latter decrease reflects the fact that current requirements for all oils are considerably below the near peak levels of this time last year.

Crude oil production averaged 3,849,000 barrels daily in the January 23 week, practically the same as in the previous week, but 462,000 barrels (10.7 percent) under the runs of 4,311,000 barrels daily in the week ended January 24, 1942.

Although crude oil stocks heretofore have been declining nearly every week, they were increased 456,000 barrels, to 232,647,000 in the week ended January 16. However, that figure is only about 3,000,000 barrels above the 20-year low point that was reached in late 1939, when oil fields of the Mid-Continent were closed down for half a month.

Markets Unchanged; Cars Moving Back Faster

Markets continued largely unchanged during the past week, as there was continued difficulty in supplying requirements for the East Coast District and the Middle West, while refineries on the Gulf Coast still were confronted with lack of transportation for moving out products.

Still an important factor in the East Coast scarcity is the apparent diversion of supplies from their normal channels into military use for export. Most suppliers report extreme difficulty in meeting the needs of their customers. Having

Crude Oil Production in the United States

(Estimates compiled by The Oil Weekly. All figures indicate daily averages, in barrels.)

STATE OR DISTRICT	*State Allowable of Crude Production	PRODUCTION IN WEEK ENDED Jan 23	Jan. 30
Arkansas	74,826	75,100	75,100
California	771,000	776,000	765,500
Long Beach		35,000	33,200
Midway-Sunset		57,000	54,800
Kettleman Hills		44,000	41,800
Wilmington		95,000	94,900
Rest of State		545,000	540,800
Colorado		6,300	6,100
Illinois		239,050	228,600
Salem		31,150	30,350
Louden		43,700	37,100
Other New Pools		152,300	149,400
Old Pools		11,900	11,750
Indiana		14,650	14,400
Kansas	304,600	307,500	291,800
Kentucky		11,400	11,550
Louisiana	320,500	340,350	338,250
North		92,800	90,600
South		247,550	247,650
Michigan	58,430	62,300	60,050
Mississippi		57,350	56,200
Missouri		100	100
Montana		19,450	15,000
Nebraska		2,650	2,650
New Mexico	99,300	98,450	98,400
New York		14,800	13,250
Ohio		10,150	10,250
Oklahoma	370,600	346,650	347,750
Oklahoma City		59,250	60,200
Seminole Area		78,550	78,050
Rest of State		208,850	209,500
Pennsylvania		44,900	46,500
Tennessee		30	30
Texas	1,307,553	1,332,650	1,331,850
Upper Gulf Coast		309,050	309,000
East Texas Field		327,450	327,850
Rest of Eastern Texas		101,800	101,650
Lower Gulf Coast		100,800	100,400
Southwest Texas		49,350	48,900
South Central Texas		17,450	17,350
West Texas		201,450	201,300
North Texas		137,050	136,850
Panhandle		88,250	88,550
Utah		15	15
West Virginia		9,350	8,750
Wyoming		93,200	92,250
Total 8 Prorated States	3,306,809	3,339,000	3,308 700
Total United States		3,862,295	3,814,345

* Details on state allowable in The Oil Weekly of January 18, page 46.

Trends of Operations and Changes in Stocks

Figures on crude stocks are from Bureau of Mines weekly reports; all others from American Petroleum Institute weekly reports, which are estimates on Bureau of Mines basis.

ITEM	Crude Oil Prod. Bbls. Day (Add 000)	Week Ended	Runs to Stills Bbls. Day (Add 000)	Week Ended	Crude Stocks Bbls. (Add 000)	Week Ended	Gasoline Stocks Bbls. (Add 000)	Week Ended	Gas Oil & Distillate Stocks Bbls. (Add 000)	Week Ended	Residual Fuel Oil Stocks Bbls. (Add 000)	Week Ended
Highs:												
1939	3,910	8- 5	3,650	10-21	278,607	5-26	87,769	4-22	39,562	10-28	116,237	8-26
1940	3,890	3-16	3,690	6-22	265,865	8-31	102,817	4-20	49,051	10-19	109,135	9-14
1941	4,337	11-22	[4]4,120	10-18	266,187	3-29	99,727	3-29	[5]54,983	11-15	102,448	1- 4
1942	[4]4,337	2- 7	3,961	1- 3	263,208	3-28	[1]107,229	3-14	49,861	11-14	95,857	1- 3
1943	3,871	1- 2	3,734	1- 2	233,938	1- 2	87,102	1-23	42,913	1- 2	72,881	1- 2
Lows:												
1939	[3]1,601	8-26	3,125	2-18	[2]229,127	10-12	71,152	10- 7	20,722	4-15	105,397	4- 8
1940	3,335	11-30	3,370	1- 6	237,339	1-27	79,847	11- 9	23,551	4- 6	102,344	2-10
1941	3,364	1-11	3,490	1-18	240,399	11-15	79,923	10- 4	28,381	4-12	90,914	7-12
1942	3,297	7- 4	3,393	5-23	231,896	12-12	75,934	12- 5	29,240	4-25	72,962	12-26
1943	3,821	1- 9	3,615	1-23	232,191	1- 9	82,420	1- 2	38,034	1-23	71,216	1-23
Trends in 1942 (Week Ended):												
Jan. 3	4,038	.....	3,961	.....	244,440	.....	92,987	.....	49,357	.....	95,857	.....
Jan. 31	3,871	.....	3,848	.....	250,740	.....	97,810	.....	40,674	.....	91,189	.....
Feb. 28	4,016	.....	3,675	.....	259,373	.....	105,635	.....	34,547	.....	88,285	.....
Mar. 28	3,820	.....	3,667	.....	263,208	.....	105,624	.....	31,756	.....	83,045	.....
April 25	3,581	.....	3,506	.....	257,073	.....	102,897	.....	29,240	.....	81,107	.....
May 30	3,877	.....	3,522	.....	255,023	.....	95,355	.....	31,384	.....	79,628	.....
June 27	3,719	.....	3,581	.....	253,364	.....	88,396	.....	32,851	.....	77,304	.....
July 25	3,691	.....	3,658	.....	249,262	.....	82,281	.....	35,966	.....	77,816	.....
August 29	3,964	.....	3,697	.....	249,007	.....	80,831	.....	42,060	.....	78,034	.....
September 26	3,909	.....	3,802	.....	242,785	.....	80,550	.....	45,945	.....	78,943	.....
October 31	3,901	.....	3,731	.....	239,266	.....	79,159	.....	48,131	.....	79,166	.....
November 28	3,878	.....	3,736	.....	234,850	.....	78,854	.....	49,739	.....	77,796	.....
January 2	3,871	.....	3,734	.....	233,938	.....	82,420	.....	42,913	.....	72,881	.....
January 9	3,821	.....	3,674	.....	232,191	.....	84,245	.....	41,367	.....	72,559	.....
January 16	3,850	.....	3,640	.....	232,647	.....	84,955	.....	39,841	.....	71,517	.....
January 23, 1943	3,849	.....	3,615	.....	.....	.....	87,102	.....	38,034	.....	71,216	.....
January 24, 1942	4,311	.....	3,874	.....	[4]246,267	.....	99,345	.....	42,307	.....	90,764	.....
Change:												
In week	—1	.....	—25	.....	+456	.....	+2,147	.....	—1,807	.....	—301	.....
In year	—462	.....	—259	.....	—13,620	.....	—12,243	.....	—4,273	.....	—19,548	.....
In year	—10.7%	.....	—6.6%	.....	—5.5%	.....	—12.3%	.....	—10.0%	.....	—21.5%	.....

[1] All time peak. [2] Lowest since April, 1922. [3] Lowest since October 1922, due to shutdown of six Mid-Continent States. [4] Stocks, January 17, 1942.

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When you see one of Uncle Sam's tough little scout cars literally "take to the air," you wonder how these machines and engines stand up under such terrific punishment and keep right on running at maximum efficiency.

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inadequate supplies, marketers are having difficulty in fairly proportioning their supplies among consumers. In the Middle West, there is continued strong demand for products of all kinds. Stocks are extremely low, except in the case of gasoline and there is continued difficulty in obtaining transportation facilities.

In the Mid-Continent, refiners and marketers report scarcity of tank cars as heretofore, although some of them have noted that cars are returning from the East in shorter time than in the past. The increased speed of handling the cars promises to enable some of the refineries to catch up with their orders.

On the Gulf Coast there are continued reports of refineries being shut down from time to time because of the lack of transportation for their production. Meanwhile, numerous inquiries continue to come in at the Gulf Coast refineries.

In the Western Pennsylvania refining district markets for most products continue strong, although neutral oils still have not greatly improved. Although some betterment has been reported, prices of neutrals so far have not shown any recovery.,

U. S. Crude Production Shows Slight Decrease

United States production of crude oil averaged 3,814,345 barrels daily in the week ended January 30. It was 47,950 barrels a day lower than in the previous week, when the total was 3,862,295 barrels per day.

Production for the eight prorated states, accounting for about 87 percent of the nation's output, decreased to 3,308,700 barrels daily from 3,339,000 barrels per day the previous week, yet still remained above the state allowables set for those states.

Oklahoma increased from 346,650 in the previous week, to 347,750 barrels per day. In general most of the states showed decreases in production. California dropped from 776,000 barrels to 765,500, a difference of 10,500 barrels daily. Illinois dropped from 239,050 to 228,600 barrels, a difference of 10,450 barrels. Indiana had only a slight change, but Kansas had a substantial drop of 15,700 barrels per day, from 307,500 to 291,800 barrels. Louisiana, Mississippi, and Texas all had slight decreases, and Montana dropped from 19,350 barrels to 15,000 per day, a decrease of 4350 barrels. New York also changed, from 14,800 in the previous week, to 13,250 barrels in this week.

Slight rises in production were noted in Ohio and Pennsylvania.

Resolution Seeks 50-Cent Increase in Crude Prices

A resolution asking for a minimum increase of 50 cents per barrel in the price of crude oil, was adopted by the Texas House of Representatives this week—there was not a dissenting vote. The resolution now goes to the Senate for its consideration.

New 15-Mile Gas Loop Installed in Hale County

West Texas Gas Company is installing a 15-mile 10-inch loop in Hale County, extending north from Hale Center, on its natural gas trunk line that supplies West Texas towns with natural gas from the Texas Panhandle.

Wilcox Trend Wildcat Drilling Getting Active Again in Texas and Louisiana

Well completions in the United States reported last week numbered 307, compared with 343 reported the previous week. Wildcats included 5 oil strikes among 41 completions. In the fields there were 257 completions, including 162 oil wells and 31 gas. The week's completions bring total for the year to 1629, a substantial drop from 2754 reported to this time a year ago.

Severe weather is retarding operations in Michigan more this winter than before because operations have shifted to the colder section.

California reports a well being completed between Coalinga Nose and Kettleman Hills.

More Wilcox drilling is in prospect in Central Louisiana, a revival of the work in LaSalle Parish that was so active a few months ago. Over in Mississippi, pipe has been set in a hole to 11,102 feet with the idea of going on from there.

Wilcox also is getting continued attention in Coastal Texas, principal interest being in DeWitt and Karnes counties. Katy gas field in Harris County is being extended. On the Louisiana end of the Coast it is noted that fewer holes are in prospect at the moment but the trend of drilling is deeper.

Meanwhile, Oklahoma has received a new field west of Lake Shawnee in Pottawatomie County and line is building to take the production.

Kansas was not without its discovery last week with potential completed in Arbuckle dolomite well in Barton County.

The western portion of Kentucky is holding interest with two wells showing for production.

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Illinois Basin

New Field in Edwards; Weiler Produces at Iola

Edwards County pool opener completed with initial of 110 barrels of oil in 16 hours. First Weiler-sand producer in Iola field, Clay County, pumps 190 barrels, giving the field its third zone. Tentative locations staked in area of Christian County Devonian discovery. First Osage lime well in Illinois testing in Lawrence County, showing water and very little oil.

Edwards County: Burr Lambert's Vanshoick 1, NW SE NW 18-1n-10e, 9 miles north and 2 miles west of Albion, pumped 110 barrels of oil in 16 hours after a shot in Aux Vases sand at 3175 feet. Completion of the well opens a new field. Several immediate tests are contemplated for the area.

Clay County: Homer Luttrell's Reed 1, NW NE NE 15-5n-5e, pumped 190 barrels of oil natural from Weiler sand at 2135 feet, first production in the area from that formation. The other pays are Benoist and Aux Vases sands.

One of the best producers yet drilled in the field is The Texas Company's Kidwell 4, SE SE NW 15-5n-5e, which swabbed 269 barrels from Benoist sand. It now is being deepened to Aux Vases and will be completed in the two formations.

Wayne County: Deep Rock Oil Corporation's wildcat test in the SW SW NW 15-3s-8e, northeast of White County's Mill Shoals field, was headed for St. Louis lime, below 3600 feet, after topping Fredonia at 3518 feet. A fair show of oil was found in Aux Vases sand at 3393-3403 feet and it is probable that the well will be plugged back to that formation unless other saturation is found.

Clinton County: Seventy-five feet of oil rose in the hole after plug was drilled at The Texas Company's Suhl 1, C SE NE 20-1n-3w, south offset to the first Devonian lime producer in the Bartelso field. Pay zone at Suhl 1 is 2473-86 feet.

Christian County: Sam Jarvis is reported to have made a tentative location in the SE SE SW 22-15n-2w, north of William H. Marlow et al's Ralph 1, SE NE NE 27-15n-2w, showing for a pool opener in Devonian lime at 1905-08 feet. Marlow et al have made location for an east offset, Ralph 2, SW NW NW 26-15n-2w. Ralph 1 was still testing, swabbing between 1 and 2 barrels of oil an hour. The test is 30 miles from other production.

Kentucky

Henderson County: Carter Oil Company's S. T. Denton 1, 21-O-23, wildcat three miles west of Robards, was drilling plug to test Benoist sand at 2361-73 feet, which previously showed 1590 feet on two-hour test.

Carter's Barrett 1, NE NE NE 25-P-25, wildcat three miles east of Anthoston, was running cement squeeze job, after drilling plug and swabbing 28 barrels of oil and only a show of oil in six hours from Benoist at 2182-89 feet.

W. F. Lacy's Woods 1, NE SW SE 20-Q-20, wildcat two miles northeast of Smith Mills pool, was moving in rotary derrick. F. Fleming is contractor.

Union County: R. S. Gardenhire's Mrs. M. I. Drury 1, NE SE NE 2-O-20, Carter Oil Company farmout, wildcat 1½ miles southwest of Hitesville, was plugged and abandoned through the McClosky at a total depth of 2685 feet. Starting at surface elevation of 424 feet, Ste. Genevieve was topped at 2557 feet.

Oklahoma

Pottawatomie County Strike Awaiting Pipe Line Outlet

Stanolind Oil & Gas Company's Bleeker 1, NW SE SW 28-10-2e, west of Lake Shawnee in Pottawatomie County, which as reported last week, has opened Wilcox production in a new spot with a flow of 35 barrels per hour, is shut in while Stanolind Pipe Line Company is building a line to take the oil. Magnolia Petroleum Company has staked Heller-Petroe 1, NW SW SE 28-10-2e, two locations east of the discovery.

Kerlyn Oil Company and Continental Oil Company's Weaver 1, NW NE NE 32-8n-3e, Pottawatomie County, has been completed for 616 barrels daily from Hunton lime at 4670-4701 feet, after acid treatment.

Seminole County: Kerlyn Oil Company and Continental Oil Company's Scott 1, NW SW SW 3-10n-7e, has been completed for 300 barrels, from Hunton lime at 4178-4270 feet.

Kansas

Barton Discovery Well Rated 80 Barrels Daily

Mid-Continent Petroleum Corporation and Palmer Oil Company's Harrison 1, discovery in Arbuckle dolomite, opening the Harrison pool at NWc NE 18-20-13w, Barton County, has been given an official potential of 80 barrels daily. Hole was drilled to 3529 feet. This field is north of Hiss production.

Pratt County: Hollow Drilling Company's Brown 1-B, SWc SE 29-26-12w, a wildcat in the oil-gas trend northeast of Iuka production, is an oil well from Arbuckle lime at 4266-4298 feet, and has been given a 3000-barrel rating after productivity test.

Marion County: South of Hilsboro pool, Westgate-Greenland Oil Company's Jantz 1, SEc NE 21-19-2e, is well into Viola, temporarily shut down after passing two shows without test. It may go to Arbuckle. Lansing was logged at 1996 feet. Mississippi at 2677 feet and Viola at 2984 feet.

In the same county, the same operator's Williams 1, C SE SE 4-17-4e, Lost Springs field extension, has been given a potential of 429 barrels.

West Texas

Crockett County Test Has Permian Possibilities

Crockett County Ordovician prospect encounters additional oil possibilities in Permian. Sterling County wildcat is nearing its Ordovician objective. Two of the trio of deep test in Winkler County have negotiated hard chert zones below Permian series.

Wildcats: Ohio Oil Company's Clark 1, southwestern Sterling County, logged base of black shale near the 7600-foot level, with elevation of 2249 feet, and was drilling dry lime at 7610 feet. Col-Tex Refining Company's Reed 1, 15 miles northwest of Sterling City, was drilling lime and shale at 6670 feet. In Pecos County, Magnolia Petroleum Company's Eaton 1-29, 5 miles southwest of Abell field, was drilling at 5670 feet in broken lime and chert, topped upon leaving Permian at 5410 feet.

Winkler County: One of the trio of scheduled Ordovician tests under way in the county had passed the hard chert section that has slowed drilling. Magnolia's Walton-State 20, between Keystone and Kermit fields, was drilling 8730 feet in gray lime, entered near the 8650-foot level. Amon G. Carter's Walton-Pure 2-C, Keystone field, was drilling chert and brown lime 7960 feet. Shell's Blue 1, near east edge of county, drilling hard chert 8655 feet on new contract that is expected to enable the test to reach the Silurian.

Crockett County: Moore Bros. et al's Todd - Amerada 1, projected 7500 - foot Ordovician test and 5 miles west of Crinoidal production, showed free oil with salt water when tester used at 2340-2475 feet in San Andres, topped at 1945 feet, elevation 2550 feet, and was drilling 2550 feet. Nine-inch protection string was cemented at 1980 feet to exclude possible oil production in 1800-1900-foot zone.

Reagan County: Amerada's University 1-R-J, northwest edge of Barnhart pool, flowed 529 barrels of 44-gravity oil, gas-oil ratio 1646/1, in 17½ hours through ½-inch choke, making 12 consecutive producers. Production is from Ellenburger perforations 9098-9145 feet, and the zone was treated with 5000 gallons of acid. Amerada's University 1-R-K, ½ mile west of its discovery, recorded high structural position in logging first Ellenburger porosity at 8958 feet, and main pay at 8968-9027 feet. Pipe will be run to bottom at 9085 feet.

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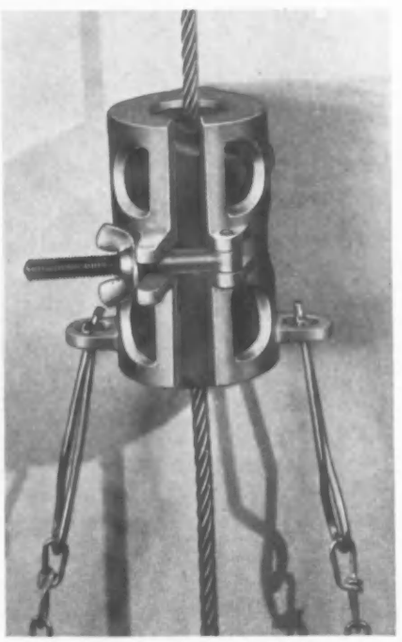

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Stephens County Deep Pay Makes Good Flow

Deep pay discovery in old Stephens County pool makes prolific flow from Mississippian. Five tests scheduled for shallow pool uncovered in Shackelford County.

Stephens County: Texas Pacific Coal & Oil Company's S. H. Hill 12-A, account 2, TE&L Section 1122 and offsetting 3200-foot Bend production in the Hill pool, flowed 357 barrels of 44-gravity oil on 4-hour test through ¼-inch tubing choke after using 1000 gallons of acid in Mississippian 4228-36 feet. It is the largest producer recorded by the district from the Mississipian, which has accounted for one well in the nearby Donnell and Stribling pools. Hill 12-A is 1½ miles southwest of the Donnell pool deep discovery, but separated by decisive failures. Texas Pacific Coal & Oil Company is starting a southwest offset to its big well, which has been connected to its gathering system that delivers oil to Premier Oil Refining Company on a 12½ - cent per barrel tariff.

Shackelford County: Roeser-Pendleton, Inc. and Continental Oil Company's Cook 3-A-139, near SW NW SW E. T. Ry. Section 139 and 1¼ miles east by south of production, pumped 91 barrels 40-gravity oil initial from Cook sand 1605-11 feet. This discovery has been designated as Cook Section 139 pool, and qualifies for a bonus allowable of 40 barrels daily for 18 months. Owners have scheduled five additional tests.

North Texas

Ellenburger Strike Due in Jack County

Ellenburger strike is promised for Jack County. Edge test for Hoefle pool is prolific well. Pumping gauge given recent Clay County discovery. Second test in Murray pool is failure in Mississippian.

Jack County: Shell's Wolfe 1, southeast corner TE&L Section 3341, 3½ miles southeast Jermyn, showed production possibilities from broken saturation in Ellenburger 5582-5631 feet, and

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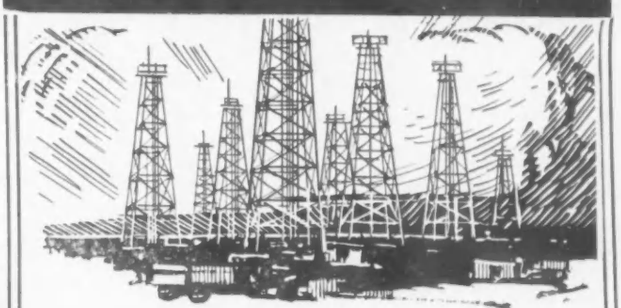

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pipe is to be run to try for completion. This wildcat yielded light flow gas when tester was used at 5587-5631 feet, and 30 feet of oil—and gas-cut mud was recovered at end of 20-minute test. Youngblood and Foree's Cherryholmes-Gulf 1, G&BN Section 3, wildcat, abandoned in dry Ellenburger 6565-6738 feet. Hanlon & Buchanan, Inc.'s Porter 3, J. S. Porter Survey and south edge of Hoefle pool, flowed 75 barrels first hour on preliminary gauge after using 3000 gallons acid in Bend 4818-70 feet.

Clay County: Roy Lee, Trustee's Maddox-Shell 1, recent discovery 10 miles north of Spring pool, pumped 144 barrels 40-gravity oil initial on unofficial test. Production is from perforations opposite Bend 5476-5506 feet, which was treated with 15,000 gallons acid. More development to follow, as it has a discovery allowable bonus of 120 barrels daily for 18 months.

Young County: Anzac Oil Corporation et al's Martin 1-B, southwest corner C. W. Townsend Survey A-1642, 2¾ miles north Eliasville possibly qualifies as a pool discovery in pumping 65 barrels oil and 150 barrels water initial from broken sand 2381-96 feet, having plugged back from 2403 feet. It is ½-mile southwest of 3400-foot production. In the Murray pool, Standard of Texas and Hanlon-Buchanan, Inc.'s Donnell 2, 1460 feet northwest of their prolific Mississippian discovery, failed to make producer in Mississippi 4596-4839 feet. Hole has been plugged back to 4500 feet to test Marble Falls.

Montague County: Continental's Heard 1, southeast offset to its Stoneburg pool discovery, passed up possibly small pumper in Bend lime 5989-6096 feet, and cored oil saturated conglomerate 6189-98 feet. This zone flowed 69 barrels oil 7 hours natural through 30/64-inch choke, indicating best well in pool. Five-inch liner will be cemented on top of conglomerate to exclude upper pay.

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East Texas

Second Quitman Well Has Good Sand Body

Recovery of 65 feet of oil sand by the second test in the Quitman pool enhances the importance of this Wood County high-gravity oil area. Pay section in northwest outpost of Coke field ample to encourage additional development. Nacogdoches County gas distillate discovery declines in output after using acid.

Wood County: Shell Oil Company's Goldsmith 1, south offset to the Quitman discovery, logged an aggregate of 65 feet of oil sand in coring to 6390 feet, and is due to continue to water level before pipe is set for completion through perforations.

Top of Paluxy was called at 6226 feet, with elevation of 459 feet. Oil sand prevailed at intervals, separated by shale breaks, while maximum sand body was logged at 6278-6304 feet. Shell's Blalock 1, north offset to the discovery, was drilling at 4695 feet, having logged Austin chalk at 3897-3975 feet, and top of sub-Clarksville at 4052 feet, with elevation of 459 feet. Structural position of these tests correlates about level with the discovery.

Coke Field: Amerada's McCreight Unit 1, northwest edge of field, paved the way for possibly west and north offsets in logging broken oil saturation in Paluxy 6299-6326 feet followed by 10 feet of solid oil sand in drilling to 6336 feet, elevation 486 feet. With pipe cemented on bottom, production test is under way through perforations 6300-32 feet. Negotiations are under way for the early construction of a pipe line outlet for this 27-well area.

Nacogdoches County: The Texas Company's Strahan 1, recent discovery in Travis Peak at 8610-60 feet, sustained drop in production after using 3000 gallons of acid solution. Following recovery of acid load, the well flowed 35 barrels distillate and 600,000 feet of gas daily through open tubing.

Bowie County: Bowlen et al's Simms-Shell 1, projected Smackover lime test, encountered anhydrite stringer at 8610-20 feet, and was fishing stuck drill pipe at 8673 feet. It is credited with being in Cotton Valley, topped at 7060 feet.

Franklin County: Tide Water and Seaboard's Bacon 1, scheduled Travis Peak test for Newsome area, drilling 3500 feet, having logged base of Pecan chalk 2920 feet, and Blossom sand 3383-3419 feet, elevation 435 feet.

Chapel Hill: Sinclair Prairie's Connally 1, Jacob Herrin Survey and 1¼ miles from nearest production on the southwest flank of the structure, registered favorable structural position in entering massive anhydrite at 7284 feet, elevation 439 feet, and was showing porosity and oil saturation in coring Pettit at 8231 feet.

Southwest Texas

Wilcox Trend Wildcats Receive More Attention

The Wilcox sand trend, long regarded by many producers as an area of questionable quality for production possibilities, is receiving more attention in the lower coastal area. Several new and deep wildcats are being planned to go into the Wilcox. Many of these prospects have been drilled before, but the wells went only to the shallow formations and did not make tests of the deeper production possibilities. Geophysical prospecting also continues at a more than usual tempo with leasing following in the wake of this work in many instances.

While more Wilcox wells are being planned, others are drilling and some are in the testing stages. The wells holding main interest at present are in DeWitt and Karnes counties.

Wilcox Wildcats: Humble Oil & Refining Company has spudded its Benavides 1, a 7000-foot well that will test the Wilcox-Midway, located in Pescadito area of western Webb County. The well will be one of the deepest ever drilled in the area and is located in J. Benavides Survey 2008, two miles south of Union Oil's Volpe 2-A, a deep dry hole.

Gulf Oil Corporation is preparing to drill an 8500-foot Wilcox test on the old Coronado block in McMullen County. Located three miles northwest of Ezzell field which produces from a shallow sand, the well will be Two Rivers Ranch Company 1. It also is one mile south of Wentz townsite. Gulf is reported to be preparing to drill another test in McMullen County, details on the second well not yet announced.

Wells Testing: American Liberty Oil Company is making a new test in Von Roeder 1, deep test in Burnell field of extreme south portion of Karnes County. Perforations were made at 6945-49 feet after this sand section showed for production earlier. Other sands were found, showing gas and distillate, at 6610-40 feet and 6743-50 feet in Carrizo section, slightly above the Wilcox section. The well is on a 204-acre lease in James Johnson Survey, Abstract 164.

Tide Water Associated Oil Company is making another test on Mueller 1, deep Wilcox test one-half mile northeast of the Gips 1 discovery at Nordheim in DeWitt County. Perforations were last made at 7184-86 feet to shut off water and gas. Before these holes were squeezed off, they tested estimated 1,000,000 cubic feet of gas and considerable salt water through ¼-inch chokes on top and bottom of hole. Sands showing gas and distillate were found at 7060-80 feet, 7080-7100 feet, 7150-66 feet, 7182-95 feet. A sand indicating oil was found at 8395-8400 feet. The well, reported to have run lower structurally than the discovery, is in Stephen Prather Survey. Exact spot of the new test has not been anonunced.

Karnes County: Phillips Petroleum Company is testing Reasoner 1, Wilcox test three miles southeast of Kenedy in Karnes County. The well, drilled to 8163 feet, was plugged back to 6758 feet where casing was set to perforate. While drilling, the well made a drill-stem test at 6580-90 feet, recovering 600 feet of 47.5-gravity pipeline oil under

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150 pounds working pressure. This apparent discovery is in Carlos Martinez grant and is one mile southeast of the company's Strunk 1, abandoned hole which showed oil and salt water at several levels in Wilcox.

Deep Test: One of the deepest tests ever drilled in the area is scheduled in th North Sun area of northeast Starr County. The test is Sun Oil Company's Montalvo Heirs 1-B, and is projected to 10,000 feet which should carry it deep inside and possibly through the Wilcox sand. The well is located 1980 feet from north line and 1000 feet from east line of an 1156-acre tract "B" lease of Los Retachez grant, one mile southwest of North Sun production.

Texas Gulf Coast

Well Indicates Major Extension to Katy Area

The Katy gas field in Harris County, already regarded as one of the major reserves in the coastal belt, is being enlarged even more with operators finding a gas sand in a well three miles north of the field. The producing limits of this reserve, which extends over into Waller County, has not been defined on all sides and this last well has not definitely outlined this side of the area unless the well is finally determined as the discovery of a new field.

Meanwhile, two other wells on the coast are drawing more than usual attention. A semi-wildcat is extending production one-half mile at Hitchcock in Galveston County while another is testing deep in the Wilcox at Ramsey in Colorado County.

Katy Area: Stanolind Oil and Gas Company is drilling deeper after making a drill stem test in Pattison 1, wildcat three miles north of Katy field in Waller Sounty, although major part of the field lies in Harris County. Although details as to sand thickness have not been announced, operators made a test at 6520-38 feet, the well showing 1000 pounds working pressure. The gas sand was topped at 6520 feet. The well is located in what is also called the North Brookshire area since it is adjacent to the old Brookshire dome. Exact location is in section 96, J. M. Bennett survey, abstract 285.

Colorado County: Cities Service is preparing to make a second test in Frank Stephens 1, wildcat on the Ramsey prospect that is opening a new gas and distillate, and possibly oil, field. Operators made their first test in the Wilcox in perforations at 10,466-82 feet. A short test was made and the well flowed at rate of 900,000 cubic feet of gas, 14 barrels of distillate and 36 barrels of water per day through 7/64-inch choke with 320 pounds pressure on tubing and 650 pounds on casing. Operators set a cement plug around 9500 feet, and the second test will be slightly above this level in top of the Wilcox. It was this section that showed best possibilities for production. The well, located in P. K. Bartlesson survey, is bottomed at 10,505 feet with casing set to 10,504 feet.

Galveston County: Maco Stewart is preparing to make a flow test on Stewart 1, semi-wildcat one-half mile east of production at Hitchcock, that has indicated a major extension. Sand was found at 5130-55 feet in Miocene, the horizon from which the field regularly produces. This well was drilled by Glenn H. McCarthy, but his production rights only pertained to that below 7500 feet. The hole was carried to 7781 feet although it was scheduled to be drilled to 11,500 feet or deeper. The test on the upper sand will be made when permit is secured. This well is in James Spillman survey.

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South Louisiana

Deep Tests Projected at Delarge and Pecan Island

Although the total number of wells planned in the coastal belt is not as great as this time in 1942, the wells that are now being projected are scheduled to be carried to deeper sands. The average footage of new wildcats therefore is due to be considerable more than any time previously. An indication of this trend is the staking of a 13,500-foot test in Delarge area of Terrebonne Parish.

Vermilion Parish: Humble Oil & Refining Company has completed its gas and distillate discovery on Pecan Island prospect and has announced location for a second test, projected to 12,000 feet with company rig to be used. The discovery well, Louisiana Land & Fur 1, flowed 47 barrels of distillate along with considerable gas through 5/32-

inch choke with 4000 pounds pressure on tubing, a gas-oil ratio of 55,000-1. Perforations were made for this last test in sand at plugged back depth of 10,850 feet. Although the well gauged this amount of distillate at this level, the perforations are reported to have been squeezed with top of cement now at 10,854 feet. Previously, a test was made in perforations at 11,240-60 feet which showed gas. Total depth is 12,057 feet, the well being located in section 34-16s-1e.

The new test is Louisiana Land & Fur 2, spotted north 30 degrees east 5280 feet from Louisiana 1 discovery, in T-16s-1e.

Terrebonne Parish: Union Producing Company has staked its first test in the Delarge area after acquiring part interest in this reserve in 1942. The well, Fitzpatrick-Vizard 1, is scheduled to be carried to 13,500 feet with Loffland Brothers as contractor. The well is out of southwest corner of section 77-19s-17e.

The Delarge field holds the world's record for deep production. So far the area has only one well, it yielding production from the 13,265-foot level in basal Miocene. Fohs Oil Company drilled the discovery well, completing the Buckley-Bourg 1, June 18, 1938. Located in section 77-19s-17e, the anticline was discovered with reflection seismograph in 1936 and 1937.

Directional Hole: Union Sulphur Company has successfully deviated a hole to kill the flow in its wildcat discovery well in Branch area of Acadia Parish. The discovery well was Gueno Estate 1 which flowed up to estimated 2400 barrels of distillate daily when the well blew out. Later the well was brought under partial control but still flowed an unusually large amount of gas and distillate through several separators.

The second well, Gueno Estate 2, located 1020 feet northwest of the discovery, was drilled as a relief hole to 10,300 feet and 5½-inch pipe was set to 10,295 feet. Later, the cement was drilled out and the hole carried to 10,317 feet where it penetrated the first hole and mud returns were lost. The first hole was killed quickly and mud circulation was started again in both holes. When the discovery producer is completed, the second test will be plugged back and drilled straight to the discovery sand.

North Louisiana

More Wilcox Drilling Due In LaSalle Parish Area

Preparations are under way for further development along the Wilcox trend in LaSalle Parish. Wildcat reported will test for production in Bienville Parish and deep wildcat put down in area of shallow production in Union Parish.

LaSalle Parish: Carter Oil Company and Phillips Petroleum Company are moving in to drill Highland Farms 2, SW SW 12-6n-4e. The Cypress Bayou field which has had five wells drilled of which three were dry holes and two were producers now has a lone well pumping. It is the Carter-Phillips' Louisiana Delta 2, NW SE 12-6n-4e, and the new test offffsets this well ½ mile to the southwest.

Catahoula Lake: Approximately five miles west of Cypress Bayou, Carter Oil

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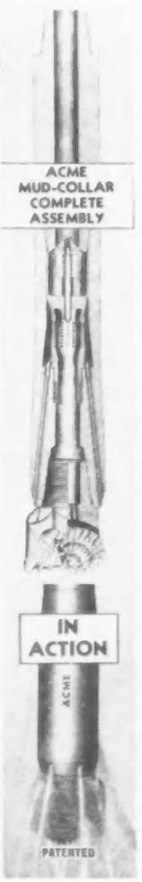

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Company will drill Catahoula Lake C-3, SE SW 6-6n-4e, and ¼ mile southwest of the company's Catahoula Lake C-2, NE SE 6-6n-4e. Catahoula Lake was a 1942 discovery and has two wells on production.

Two other fields with lone producers are located three miles south of Cypress Bayou and Catahoula Lake fields and discovered in 1942. They are: Elm Ridge and Indian Bayou. Production in the four fields is from the Wilcox at approximately 4294 feet.

Union Parish: H. L. Hunt Oil Company's deep wildcat, Frost 1, SW NE 18-23n-1e, has reported no worthwhile shows in drilling and the test is drilling ahead below 6950 feet prospecting in this all but depleted area discovered in 1923 and in which presently four wells are producing from shallow upper cretaceous.

Mississippi

Adams County Wildcat Sets Casing at 11,102 Feet

Pure Oil Company's McDowell 1, SE SE 1-6n-4w, Adams County, has pipe set to 11,102 feet, total depth and plans to go deeper. A broken sand section 28 feet thick in a 90-foot core at 10,350-440 feet with apparently good saturation had been found previously at this test 4 miles southwest of Natchez. Nearest production to McDowell 1 is 12 miles north at Lake St. John field, which reported gas-distillate shows, in an early test in one of the first wells in that field at 10,000 feet. At present general production is from shallow Wilcox at 3400-foot horizon at Lake St. John.

California

Guijarral Hills Wildcat Shows for Oil Discovery

A successful test of Standard Oil Company's wildcat, Pleasant Valley 82-29F, in the Guijarral Hills area, Fresno County, gives promise that a new discovery of importance is in the making. The well is in section 29-20-16, and is situated between Coalinga Nose and Kettleman Hills, two of the state's great oil fields. Nearest production is that at Coalinga Nose, 2½ miles to the northwest.

Well saturated oil sand, similar in characteristics to that of Coalinga Nose, was topped at 8940 feet, in Eocene. On formation test of the interval 8942-8965 feet, with 900 feet water cushion, open 45 minutes, gas to surface in 12 minutes, recovery was 6780 feet of clean 29 gravity oil and gas. It is now standing cemented with 7-inch casing at 8943 feet.

Fresno County: Shell Oil Company's try for a find in the little exploited Tranquility - Nicholson area of Fresno County, Shell-Standard-Henderson 66-22, has reached the critical depth of 11,935 feet without anything in the way of encouraging showings. An electric log of the hole has been made, and based upon this and other factors a decision will be made this week as to how much further the project will be carried down.

Los Angeles County: A small rush for oil well locations within Los Angeles

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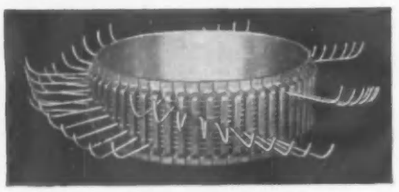

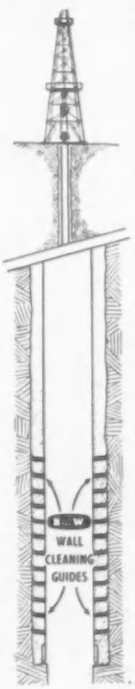

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city limits has been precipitated by the success of Shell Oil Company in inducing municipal authorities to relax long-existing prohibitions against new oil well drilling. Latest to seek a permit is Universal Consolidated Oil Company, holding a 10-acre parcel on Beverly Boulevard, at La Cienega. This intersection is a Los Angeles landmark because of an old-time pumper that stands in the middle of La Cienega, still in operation. Universal has opened a tract office and is soliciting all property owners in a selected area for rights to whipstock under their residential properties.

Michigan

Severe Weather Slows Operations

Severest snow storms since 1936 impeding operations generally throughout the state with two prospect producing wildcats isolated. Five-location program in Aetna district of Missaukee County held back by storms.

The effect of heavy snowfall this month has been worse than ever before primarily because more operations center in the north-central part of the state. Moreover, county highway departments in particular lack enough labor to man snow-removal equipment. Neither are workers available for oil companies to aid in clearing roads to well locations.

Typical example reported: Gauger for Leonard Pipe Line Company forced to use snow shoes and trek two miles from field to company's truck-loading rack on highway, making continuous return trips to start and stop pumps.

Missaukee County: Gordon Oil Company, Leonard Drilling Company and Rowmor Company bought an 880-acre lease spread from Walter Heintz to give three companies with their previous holdings dominant position in the Aetna field. A five-well program for Aetna is underway but is held up pending clearing of roads.

Enterprise: Sun Oil Company is still swabbing State A-1, Section 11-23n-5w, potential field discovery, with latest tests showing from 35 to 90 barrels of fluid per day and ranging from 10 to 20 percent water. Production is from Dundee lime at 3239-40 feet, and water may be reaching hole from channel in cement on 5-inch casing.

Van Buren County: Clock Oil Company's Marr 1, SW SW SE 24-1s-16w, Geneva Township, logged Traverse lime objective at 1068 feet and at 1069-70 feet carried 700 feet of oil in 12 hours. Test was idle for six days waiting clearing of roads to move in tubing preparatory to acidizing. This wildcat is located between Bangor and Bloomingdale pools.

Allegan County: Muskegon Oil Corporation's Podurgiel 1, SW NW SE 29-4n-12w, first Monroe lime test in the Dorr Traverse shallow field, pumped 125 barrels and 75 barrels on two-day test after second acid treatment of Monroe at 3035-38 feet. This is the first promising Monroe well in Southwest Michigan. The oil is 22 gravity of heavy asphalt base.

Gladwin County: Bloger and Hilliard's State 1, N½ NW SE 13-17n-1e, between old Buckeye and Bentley fields, carried a show of oil at 3457-58 feet, 8 feet in Dundee lime. Location is isolated by snow-plugged roads.

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United States Well Completions

CALIFORNIA

Fresno County—Coalinga old field: Shell's 40-14, 14-19-15, pump 524 bbls, 75 ft perf 2780 ft, Black shale 2595 ft, Kreyenhagen 2780 ft, td 2796 ft.

Standard's 109-35A, 1666 ft s 1602 ft w nec 36-19-15, pump 144 bbls, 136 ft perf 3062 ft, td 3065 ft.

Kern County—Kern Front: General's Young 45,759 ft s, 290 ft n¼c 18-28-27, pump 98 bbls 14.2-gr, 179 ft perf 1874 ft, td 1875 ft.

Standard's 33,866 ft n, 868 e swc 15-28-27, pump 45 bbls, 7-in 2523 ft, td 2525 ft.

Kern County—Midway-Sunset: Marvic Associates' 3240 ft s, 1141 w nec 16-31-22, pump 50 bbls 12.5-gr, 340 ft, perf 1470 ft, td 1470 ft, pd 1237 ft.

Kern County—Mount Poso: Shell's Vedder 36, 2346 ft s, 1758 e nwc 9-27-28, pump 73 bbls 15-gr, 71 ft perf 1910 ft, Vedder 1840 ft, td 1910 ft.

Kern County—Poso Creek-Premier: Standard's 4-8, 330 ft s, 989 w nec 8-28-27, pump 12 bbls, 215 ft perf 2878 ft, td 2884 ft.

Standard's 9-9, 985 ft s, 330 e nwc 9-28-27, pump 117 bbls, 218 ft perf 2873 ft, td 2875 ft.

Kern County—Round Mountain: Honolulu's 42, 1150 ft s, 100 e n¼c 18-28-29, pump 118 bbls 14.5-gr, Vedder 1973 ft, td 2018 ft.

Los Angeles County—Montebello: Standard's Baldwin 91, 89 ft s, 2417 e nwc 1-2-12, pump 44 bbls 15-gr, 474 ft perf 2770 ft, td 2825 ft, pd 2770 ft.

Los Angeles County—Playa del Rey: Union's Vidor 18, 879 ft sely along ppty line fr nwc lease thence 335 ft nely at r/a, pump 33 bbls 22.8-gr, 91 ft perf 6104 ft, td 6106 ft.

Los Angeles County — Huntington Beach: L. B. Oil Development's W-42, 960 ft nely along n line Seaside Blvd fr e side 27th Ave thence 2336 ft sely at r/a, pump 250 bbls 15.3-gr, 415 ft perf 3098-3332 ft, 3393-3476 ft, td 3481 ft.

Los Angeles County—Wilmington: Royalty Service's Nelson A-3, 38 ft n, 74 w c/l "D" and Flint Sts, recompletion pump 100 bbls. Whipstocked fr 2566 ft, redrilled to 3480 ft, 738 ft perf 3480 ft, td 3550 ft, new bottom 3480 ft.

Orange County—Huntington Beach: S. W. Exploration's State 49, 271 ft n 4241 ft w c/l 23rd and Ocean Ave, pump 203 bbls 23.4-gr, 685 ft perf 5728 ft, td 5728 ft.

Ventura County—Rincon: Honolulu's Whitten 56-3, 2280 ft sly 202 ft wly fr nec State lease 56, flow 540 bbls 30-gr, 200/780 lbs, 41 ft perf 2627 ft, td 2985 ft, pd 2653 ft.

CALIFORNIA WILDCATS

Kern County—Jasmine Area—Failure: Trico Oil & Gas Co.'s Trico-Amalgamated 1, 990 ft n, 1650 e swc 17-25-28, after logging top Pyramid Hills equivalent at 1022 ft, abnd 1098 ft in fine gray sand.

Mountain View Area—Failure: Di Giorgio Fruit Corp.'s Di Giorgio 2, 330 ft s, 330 w c 12-31-29, abnd 1098 ft without showings after topping granite at 1022 ft.

Los Angeles County—Potrero Area—Failure: Duquesne Oil Co.'s Eunice 1, 330 ft s, 990 w nwc 3-3-14, abnd 4084 ft.

Ventura County — Rincon Area — Failure: Chansior Canfield's Hobson C-10, 1943 ft s, 1690 w nec 17-3-24, td 10,065 ft, redrilled from 1600 ft to 9322 ft, lost drill pipe, unable to recover, abnd.

COLORADO

Rio Blanco County—Rangely: Raven Oil & Refining Co.'s Fee 44, cwl sw ne 31-2n-102w, abnd 1503 ft.

COLORADO WILDCAT

Weld County—Buckingham-New Raymer—Failure: Ramsey Petroleum Corp.'s Graham 1, csw sw 14-7n-59w, Timpas lime 6161 ft, Muddy 6652 ft, Dakota 6735 ft, Lakota 6815 ft yielding 2800 ft water in hole, abnd 7005 ft.

ILLINOIS

Clay County: Texas Co.'s Landwehr 4, c se nw nw 9-5n-7e, Weller 2478-99 ft, 9 bbls, 2500 ft.

Fayette County: H. Luttrell et al's Aukamp A-4, c sw se se 30-5n-3e, abnd 1924 ft.

H. Luttrell et al's J. Ford 5, nw se nw 31-5n-3e, abnd 1904 ft.

Franklin County: E. S. Adkins' Orient Coal Co S-1, c se se se 12-7s-2e, abnd 2756 ft.

Seaboard Oil Co.'s U. S. Coal & Coke 7, near c north line ne 23-6s-4e, abnd 2862 ft.

Gallatin County: Carter's Gregg 1, c se se se 5-8s-8e, abnd 1999 ft.

Hamilton County: Shell's Ventress 6, c nw sw se 12-6s-5e, Aux V 3070-3107 ft, 205 bbls, 3114 ft.

Texas Co.'s Smith 5, nw se se 12-6s-5e, Aux V 3060-78 ft, 202 bbls, 3080 ft.

Shell's Crabtree B-8, c ne ne ne 23-6s-5e, Aux V 3101-13 ft, 134 bbls, 3115 ft.

Texas Co.'s Johnson 4, c se 27-6s-6e, Aux V 3056-3100 ft, gas input, 3109 ft.

Texas Co.'s Wilson 2, c sw 27-6s-6e, Aux V 3088-3155 ft, gas input, 3115 ft.

Texas Co.'s Brown Comm. 2, c se se ne 34-6s-6e, abnd 3288 ft.

Texas Co.'s Johnson 5, near c north line ne 34-6s-6e, Aux V 3093-3103 ft, gas input, 3103 ft.

Texas Co.'s Earnst 3, c sw nw nw 21-4s-7e, Aux V 3268-85 ft, 202 bbls, 3291 ft.

Jefferson County: Shell's Howe 1, c se nw sw 25-2s-1e, Benoist 1978-84 ft and 1986-89 ft, 170 bbls, 1989 ft.

Lawrence County: Ryan Oil Co.'s Schaffer 2, c sw ne sw 27-2n-12w, Benoist 2030-2055 ft, 75 bbls, 2063 ft.

Richland County: Pure's Harrell 1, c nw sw se 26-4n-9e, Weller 2569-2586 ft, 59 bbls, 2586 ft.

Wayne County: Pure's Riggs Consol 1, c se ne sw 2-1n-7e, Aux V 2932-2955 ft, 199 bbls, 2965 ft.

Pure's Spicer 1, c se sw 8-1s-6e, Aux V 3009-36 ft, 351 bbls, 3235 ft.

Bell Bros.' Fuhrer 7, c ne nw nw 33-1s-6e, Aux V 3027-42 ft, 155 bbls, 3044 ft.

Shulman Bros.' Reed 1, c se nw 29-1s-7e, abnd 3273 ft.

Deep Rock's Sidwell 1, c se ne 31-1s-7e, abnd 3245 ft.

White County: Pure and Carter's Austin Consol 2, c se nw nw 17-6s-9e, Pt Crk 2830-33 ft, 26 bbls, 2833 ft.

ILLINOIS WELL DEEPENED

White County: First Nat'l Pet. Trust's Ford 5, c nw sw sw 22-4s-14w, otd 2859 ft, abnd 2957 ft.

ILLINOIS WILDCATS

Clay County—Failure: Roy R. Powers' Kaufman-Isenberg Comm. 1, c sw ne ne 21-5n-6w, abnd 2573 ft.

Crawford County—Failure: Rush & Meredith's A. J. Mushrush 1, c ne se ne 20-5n-13w, abnd 2550 ft.

Jefferson County—Failure: Byars & Ellison's Jeff O&G Co. 1, c se sw nw 32-3s-2e, abnd 2766 ft.

Jefferson County — New Field: Mohawk Drlg. Co. et al's Waters-Hopkins Comm. 1, c ne ne 27-3s-4e, McCl 3078-88 ft, 366 bbls, 3089 ft.

Wayne County—New Field: Deep Rock Oil Corp.'s Atkinson-Windland 1-A, c ne sw 12-2s-6e, McCl 3316-18 ft, 223 bbls, 3374 ft.

White County—New Field: Phillips' Kuykendall 1, n½ ne ne 25-4s-10e, McCl 3076-85 ft, 45 bbls, 3091 ft.

White County—Failure: N. E. Marshall's Justice 1, c se nw ne 20-6s-8e, abnd 3305 ft.

Williamson County—Failure: Dick Walters et al's Anders 1, c nw nw se 9-9s-2e, abnd 1689 ft.

Wells Completed in the United States in Week Ended January 30, 1943

Data preliminary and subject to revision. Revised and more complete data on all completions shown in monthly summary of drilling, published in second issue of each month. More detailed data on wildcats published in third issue of each month.

STATE OR DISTRICT	FIELD COMPLETIONS — New Wells: Oil	Gas	Distillate	Water Input	Gas Input	Water Disposal	Dry	Total	FIELD COMPLETIONS — Old Wells Drilled Deeper: Oil	Gas	Dry	Total	WILDCAT COMPLETIONS: Oil	Gas	Distillate	Dry	Total	ALL COMPLETIONS: This Week	Last Week	Cumulative: This Year	Last Year
Alabama																					2
Arkansas																				6	11
California	15							15								4	4	19	30	125	102
Colorado							1	1								1	1	2		5	
Georgia																					1
Illinois	12				3		8	23			1	1	3			5	8	32	52	181	284
Indiana	2							2								1	1	3	6	18	37
Kansas	4						4	8	1			1	1			7	8	17	31	139	213
Kentucky	1						2	3										3	7	21	20
Louisiana	6						3	9					1			1	2	11	7	47	116
North Louisiana	5						2	7										7		12	
South Louisiana	1						1	2					1			1	2	4	7	35	
Michigan	3	1					1	5										5	11	35	82
Mississippi																2	2	2		2	27
Missouri																					2
Montana	8	10					4	22										22		34	17
Nebraska																					7
New Mexico	1							1	1			1						2	5	22	39
New York	11			7				18										18	19	89	131
Ohio	4	9					5	18										18	17	96	136
Oklahoma	14	1			2		10	27	3	1		4				3	3	34	23	144	209
Pennsylvania	42	1						43										43	44	222	328
Tennessee																					1
Texas	22	2					12	36	1		1	2				11	11	49	81	345	919
East Texas	1						1	2										2	3	13	
North Texas	2						7	9	1			1				5	5	15	17	81	
West Central Texas	2						3	5			1	1				1	1	7	5	29	
West Texas	12							12										12	17	75	
Texas Panhandle	1	1						2										2	7	27	
Gulf Coast, Upper							1	1								2	2	3	4	2	
Gulf Coast, Lower	3	1						4										4	13	50	
Southwest Texas	1							1								1	1	2	13	41	
South Central Texas																2	2	2	2	7	
West Virginia	1	6					2	9										9	10	73	63
Wyoming	16	1						17								1	1	18		25	7
Total United States	162	31		7	5		52	257	6	1	2	9	5			36	41	307	343	1,629	2,754

INDIANA

Vanderburg County: Illiind Oil Corp.'s Schutte-Weber 1, se se sw 29-6s-11w, Walts 1804-12 ft, 50 bbls, 1812 ft.

Sells Pet. Co.'s J. A. McCarty 5, sw se nw 32-6s-11w, Walts 1773-93 ft, 80 bbls, 1793 ft.

INDIANA WILDCAT

Vanderburg County — Failure: Roy Lee, Trustee's Oakland City College 1, c e½ se sw 3-7s-11w, abnd 2501 ft.

KANSAS

Barton County — Lanterman Area: Lario O&G Co.'s Musenberg 1, c e½ se se 9-19s-11w, conglomerate 3323 ft, abnd 3357 ft.

Barton County—Silica: Gulf's Langfeld 1, ne ne se 15-20s-11w, Arb 3298 ft, 4000 gal acid, pump 3 bbls oil, 55 wtr, abnd 3311 ft.

Butler County—Fox-Bush: Morrison Bros.' Bush 1-A, c se nw 24-29s-5e, Bartles 2776 ft, shot 80 qts, pump 30 bbls, 2836 ft.

Harvey County—Graber Area: Keener Oil Co. and Iron Drlg. Co.'s Legree 1, nw se se 6-22s-1w, Arb 3504 ft, pb to 3292 ft, 1100 gals acid, swab 90 bbls fluid 90% wtr, abnd 3530 ft.

Jefferson County—McLouth: Apperson's McLeod 1, c ne nw 9-10s-20e, Miss 1574 ft, abnd 1708 ft.

Reno County—Zenith: Magnolia's Darr 1, c sw nw 6-24s-10w, Viola dolo 3708 ft, 2000 gal acid, flow 353 bbls 12 hrs, 3719 ft.

Rice County: Aylward Prod.'s Schoonover 1, sw sw sw 31-18s-9w, Arb 3348-51 ft, abnd 3351 ft.

Rice County—Silica Area: Woodriver O&R Co.'s Doll 2, c n½ sw sw 19-19s-10w, Arb 3307 ft, 850 gal acid, 979 bbls, 3370 ft.

KANSAS WELL DEEPENED

Russell County—Gorham: Skelly's Boxberger C-2, c e½ sw se 12-14s-15w, otd 3280, Arb 3279 ft, 500 gal acid, pump 50 bbls 8 hrs, 3285 ft.

KANSAS WILDCATS

Edwards County — Failure: J. H. Hershey and H. T. Ritchie's Hawley 1, ne se ne 13-24s-17w, Anhy 1105 ft, Lans 3845 ft, Miss 4306 ft, Viola 4425 ft, Simp 4542 ft, Arb 4661 ft, abnd 4685 ft.

Ellis County—New Field: Pryor & Lockhart's Kraus 1-A, ne se sw 17-14s-19w, Anhy 1458 ft, Ft. Riley 2320 ft, Florence 2415 ft, Heebner Topeka 3225 ft, Heebner 3446 ft, Lans 3498 ft, Base KC 3765 ft, Marm chert 3772 ft, Cherty cong 3795 ft, Cong sand 3798 ft, pump 49 bbls, 33.3-gr, td 3805 ft.

McPherson County—Failure: Globe O&R's Ostlind 1, sw sw ne 8-19s-3w, Miss 3135 ft, Viola 3608 ft, Arb 3783 ft, abnd 3790 ft.

Pratt County—Failure: Barbara Oil Co.'s Allmon 1, se se ne 22-26s-11w, Topeka 3070 ft, Lans 3717 ft, Miss 4065 ft, Viola 4285 ft, Simp 4385 ft, Arb 4457 ft, abnd 4485 ft.

Rice County—Failure: Alpine Oil & Royalty Inc.'s Blackhall 1, ne ne ne 5-21s-8w, Lans 2885 ft, Base KC 3184 ft, Cherty cong 3221 ft, Basal Penn 3290-3320 ft, Viola 3345 ft, Simp 3396 ft, Arb 3465 ft, abnd 3485 ft.

Rooks County—Failure: Three Way Drlg. Co.'s Roelff 1, c n½ ne nw 31-7s-17w, Anhy 1277 ft, Lans 3066 ft, Base KC 3321 ft, Cong 3365 ft, Simp sh 3422 ft, Arb 3437 ft, abnd 3485 ft.

Rush County—Failure: Bird Hanley and Sheedy's Allen 1, nw sw sw 32-16s-16w, Anhy 1142 ft, Lans 3307 ft, Arb 3603 ft, abnd 3675 ft.

Saline County — Failure: Bay Pet. Co.'s Peterson 1, ne sw nw 32-16s-1w, Miss 2672 ft, abnd 2738 ft.

KENTUCKY

Daviess County: Andrew Teller's Lebold 8, 13-N-28, Tar Spgs 1255-73 ft, 30 bbls, 1273 ft.

Hart & Hart's Dixon 3-1, 5-Q-31, abnd 1400 ft.

McLean County: J. C. Miller's Bayken 1, 22-M-29, abnd 1543 ft.

NORTH LOUISIANA

Claiborne Parish — Haynesville: Midstates' Waller 6, 3-23n-8w, flow 363 bbls, 12 hrs, cp 850, tp 300, 5000 gals acid, perf 5374-91, td 5474 ft.

Claiborne Parish—Sugar Creek: Roy Lee, Trustee s R. Simms 1, 29-20n-5w, abnd 6251 ft.

Claiborne Parish—Lisbon: Big West Drilling Co.'s Rodasil 1, 34-21n-5w, abnd 9905 ft.

Claiborne Parish—Haynesville: Skelly Oil Co.'s Sherman 1, 1-23n-8w, flow 16 bbls hr, 24/64-in, cp 800, tp 200, 4000 gals acid, 5480 ft.

Caddo Parish—Caddo-Pine Island: Magnolia's Doan-Thigpen 45, 6-20n-15w, pump 10 bbls, 1547 ft.

W. T. Bell's Thigpen-Herold 2, 34-22n-16w, pump 10 bbls, 2462 ft.

Concordia Parish—Lake St. John: California Co.'s Applegate 5, 13-9n-10e, flow 163 bbls, perf 4541-46, td 4586 ft.

SOUTH LOUISIANA

LaFourche Parish—Chacahoula: Sun's Dibert, Stark & Brown 15, 4188 ft w, 400 n se c 72-15s-15e, 7-in 7767 ft, perf 7737-57 ft, 180 bbls ⅛-in, td 8197 ft.

St. Mary Parish—Bayou Sale: Humble's Miami Corp. 2-E, fr sw cor sec 44, go n 2238 ft alg wl, thence e at ra 399 ft in 44-16s-9e, casing 10,865 ft, perf 10,802-08 ft, abnd 11,291 ft.

Vermilion Parish—West Gueydan: Magnola's Reese 1-B, 663 ft s, 687 w ne c 5-12s-2w, 7-in 10,840 ft, perf 10,068-72 ft, flow 135 bbls, 3/32-in, td 10,842 ft. Opens new sand.

SOUTH LOUISIANA WILDCAT

Livingston Parish — Failure: Danciger & William Helis' McGreevy 1, Springfield area, 960 ft w and 189 ft s of ne cor sec 1-8s-6e, abnd 7415 ft.

MICHIGAN

Isabella County—Deerfield: Osceola Transportation Co.'s Leach 1, nw se se 24-14n-6w, Stray sand, 186,000 gas, 1352 ft.

Osceola County—Evart: Sun Oil Co.'s Wilcox 2, n½ sw nw 27-18n-8w, Dundee lime, pump and flow 125 bbls, 3733 ft.

Ottawa County—South Tallmadge: Fisher-McCall, Inc.'s C-1, e½ se, 1-6n-13w, Traverse lime, pump 20 bbls, td 1875 ft.

Ottawa County—Zeeland: J. E. Hood's Ansink 1, se sw sw 29-5n-14w, Traverse lime, abnd 1480 ft.

E. W. Leeder's Jannes 1, se ne ne 32-5n-14w, Traverse lime, abnd 1550 ft.

Van Buren County—Mill Lake: C. C. Goff's Sage 1, sw nw 13-1s-14w, Traverse lime, pump 10 bbls, 1291 ft.

MISSISSIPPI WILDCATS

Issaquena County: H. L. Hunt Oil Co.'s Delaney 1, 26-13n-8w, abnd 3999 ft.

Sharkey County: H. L. Hunt's Cameron 1, 6-13n-6w, abnd 4207 ft.

MONTANA

Glacier County—Cut Bank: Santa Rita Oil & Gas Co.'s Jacobson 4, c nw sw 23-37n-5w, cable, swab 50 bbls, Lower Cut Bank 2599-2613 ft, 7-in set top saturated Sunburst 2435-50 ft, td 2640 ft, elev 3784 ft.

Texas' Lindquist 8, c ne sw 20-32n-5w, cable, swab 110 bbls, Lower Cut Bank 2680-90, 7-in 2676 ft, td 2720 ft, elev 3503 ft.

Fallon County — Baker-Glendive: Montana Dakota Utilities' 165, se nw ne 7-10n-58e, rotary, .295 gas, 110 lbs rp, Judith River 767-805 ft, td 808 ft.

Montana Dakota's 166, nw ne sw 35-10n-58e, rotary, 3.850 gas, 85 lbs rp, Judith River 883-950 ft, td 950 ft.

Montana Dakota's 167, csw 19-9n-59e, rotary, .350 gas, 91 lbs rp, Judith River 995-1100 ft, td 1100 ft.

Glacier County—Cut Bank: A. B. Cobb & Co.'s Tribal 1, se se sw 19-32n-5w, cable, swabbing 105 bbls, Lower Cut Bank 2911-32 ft, td 2943 ft.

A. E. Crumley's Weaver 3, sw nw ne 7-35n-6w, cable, swabbing 140 bbls, Lower Cut Bank 2872 ft, td 2923 ft.

Glacier Production Co.'s Lookhoff 6, cnw se 33-33n-5w, cable, swabbing 412 bbls, Lower Cut Bank 2883 ft, td 2901 ft.

Santa Rita Oil & Gas Co.'s Clarke 1, csw sw 34-35n-6w, cable abnd 3039 ft.

Santa Rita's Jackson 1, cne sw 25-34n-6w, cable, pump 30 bbls, Lower Cut Bank 2941-44 ft, td 2950 ft.

Trigood Oil Co.'s Tribal-231 2, se se sw 30-32n-5w, cable, pump 240 bbls, Lower Cut Bank 3030-45 ft, td 3047 ft.

Phillips County—Bowdoin: Montana Dakota's 656, cse ne 8-31n-32e, rotary, abnd 1150 ft.

Montana Dakota's 678, sw ne sw 25-32n-32e, rotary, .548 gas, 240 lbs rp, td 1051 ft.

Montana Dakota's 685, csw 21-32n-33e, rotary, .627 gas, 232 lbs rp, Bowdoin 700-754 ft, Phillips 866-960 ft, td 1006 ft.

Montana Dakota's 686, csw 16-32n-33e, rotary, .648 gas, 237 lbs rp, Bowdoin 692-765 ft, Phillips 827-1000 ft, td 1000 ft.

Montana Dakota's 687, ne sw sw 36-32n-33e, rotary, .439 gas, 228 lbs rp, Bowdoin 696-746 ft, Phillips 931-940 ft, td 996 ft.

Montana Dakota's 693, csw 16-32n-32e, rotary, .814 gas, 302 lbs rp, Bowdoin 735-791 ft, Phillips 920-1065 ft, td 1065 ft.

Montana Dakota's 714, cse 36-32n-34e, rotary, .310 gas, 203 lbs rp, Bowdoin 766-826 ft, Phillips 890-920 ft, td 1065 ft.

Montana Dakota's 715, cne 1-31n-34e, rotary, .686 gas, 200 lbs rp, Bowdoin 765-805 ft, Phillips 855-875 ft, td 1065 ft.

Toole County — Kevin-Sunburst: Big West Oil Co.'s Dahlquist 19, ne nw ne 28-35n-3w, cable, abnd 1778 ft.

O. E. DeSchon's Davidson 2, nw ne ne 28-35n-2w, cable, abnd 1780 ft.

Texas Co.'s Bruins 16, se ne se 9-35n-2w, cable, pump 120 bbls, Ellis-Madison contact 1622-26 ft, td 1628 ft.

NEW MEXICO

Eddy County: Skelly's Dow 3-B, c nw nw 21-17s-31e, flow 455 bbls, 2-in, natural, lime 2950-3555 ft.

NEW MEXICO WELL DEEPENED

Eddy County: Plains Prod. Co.-P. B. English's Jones 1, c se ne 24-19s-31e, West Lusk pool discovery, otd 2470 ft, pump 77 bbls, acid 1000 gals 2461-2635 ft.

NEW YORK

Allegany County: Liberty Share Corp.'s Macken-Lee farm, Bolivar, 9 bbls, Richburg, 1489 ft.

Ebenezer Oil Co.'s Norton farm, Bolivar, 8 bbls, Richburg 1642 ft.

N. V. V. Franchot's Holtum farm, Scio, 6 bbls, Richburg, 1265 ft.

Messer Oil Corp.'s "M," Allen farm, Alma, 7 bbls, Richburg, 1374 ft.

Hope Oil Co.'s Norton farm, Scio, 5 bbls, Richburg, 1369 ft.

McEuroe & Brown's Witter farm, Alma, 8 bbls, Richburg, 1331 ft.

I. & H. Oil Co.'s Empire farm, Wirt, 6 bbls, Richburg, 1446 ft.

Deer Creek Oil Co.'s O'Connor farm, Genesee, 5 bbls, Richburg, 1336 ft.

Carter, Bradley & Streeter's Canfield farm, Wirt, 7 bbls, Richburg, 1377 ft.

Messer Oil Co.'s Koehler farm, Clarksville, 5 bbls, Richburg, 1438 ft.

Max Andrews' Clair farm, Wirt, 5 bbls, Richburg, 1366 ft.

NEW YORK INTAKE WELLS

Allegany County: Sloan & Zook's Welch farm, Bolivar, Richburg, 1530 ft.

Franchot Oil Co.'s Murphy farm, Bolivar, Richburg, 1433 ft.

Andrews Bros. Oil Co.'s Minnum farm, Alma, Richburg, 1473 ft.

Hope Oil Co.'s Norton farm, Scio, Richburg, 1373 ft.

Scio Oil & Gas Co.'s Clark farm, Scio, Scio, 833 ft.

H. W. Patterson et al's Black farm, Scio, Scio, 840 ft.

Healy Petroleum Co.'s Garthwaite farm, Bolivar, Richburg, 1566 ft.

OHIO

Athens County: H. B. Walker's Wingett 2, 1,000,000 gas, 1018 ft.

Choquill et al's White 3, 85,000 gas, 1623 ft.

Guernsey County: Ohio Fuel's Robinson 1, 563,000 gas, 3201 ft.

Lawrence County: Ohio Fuel's Rogers 1, 163,000 gas, 3209 ft.

Medina County: Ohio Fuel's Indoe 1, abnd 3530 ft.

Meigs County: Ohio Fuel's Midkiff 1, abnd 1817 ft.

Nolan Shuster's Fee 3, 222,000 gas, 947 ft.

Morgan County: Pure s Williams 1, 400,000 gas, 4284 ft.

C. P. Bowman's Hoffman 3, abnd 1000 ft.

Swingle et al's Foraker 1, 170,000 gas, 1167 ft.

Perry County: Ohio Fuel's Bennett 1, abnd 4012 ft.

Preston's Smitley 2, 75 bbls, 3200 ft.

Pure's Pargeon 7, 50 bbls, 3249 ft.

Summitt County: Wm. Dempsey's Mance 1, 823,000 gas, 3023 ft.

Star Drilling Mach. Co.'s Fee 1, 356,000 gas, 3850 ft.

Wood County: Carl H. Schwyn's Whiteacre 2, 1 bbl, 1405 ft.

Inman & Stevens' Kramer 1, 3 bbls, 1600 ft.

Pember et al's Lein 1, abnd 1400 ft.

OKLAHOMA

Carter County—Unnamed: Samedan's Bussell 1, ne se se 14-5s-1e, sand 2700-26 ft, abnd 2731 ft.

Creek County — Cushing: Grimes & Neal's Tiger 18, c ne nw 17-17n-7e, Osw 2260 ft, pay 2299-2344 ft, pb to 2336 ft, 1000 gal acid, pump 62 bbls, 2344 ft.

Creek County—South Sapulpa Dist.: E. C. Bradley's Fee Bradley 1, sw ne nw 4-17n-11e, sand 1565 ft, shot 40 qts 1565-76 ft, abnd 1582 ft.

L. B. Jackson's Turner 1, s½ ne ne 29-17n-11e, Bartles 1961 ft, pump 8½ bbls oil, 25 wtr, 2056 ft.

Creek County—Glenn: Gulf's Berryhill 1, c w½ sw 9-17n-12e, Glenn 1473-1637 ft, repressure well, 1639 ft.

Gulf's Berryhill 2, c e½ w½ sw 9-17n-12e, Glenn 1427-1593 ft, repressure well, 1597 ft.

Sinclair Prairie's Berryhill 46, w½ se ne 16-17n-12e, Glenn 1396 ft, pb to 1563 ft, shot 140 qts 1464-1563 ft, pump 10 bbls, 1569 ft.

Sinclair Prairie's Berryhill 48, ne sw se 16-17n-12e, Glenn 1418 ft, shot 140 qts, pump 5 bbls, 1583 ft.

Garvin County—Pauls Valley: Pure's Jackson 2, nw sw se 31-4n-1e, sand 4090 ft, flow 123 bbls oil 5 hrs, 300,000 gas 24 hrs, 4119 ft.

Logan County—Guthrie Townsite: Sunray s Katcher 1, se ne sw 7-16n-2w, Wx 5675 ft, flow 120 bbls, 5743 ft.

Marshall County—Cumberland: Pure's Crissman 104-5, se sw se 20-5s-7e, McL 5422 ft, sand 5843 ft, flow 377.48 bbls, 1-in, 4 hrs, flow 943, 920 cfg 24 hrs, 5931 ft.

Noble County — NE Liberty: Deep Rock's Veronneau 1, n½ sw ne 10-22n-2e, 2nd dolomite 4393 ft, abnd 4415 ft.

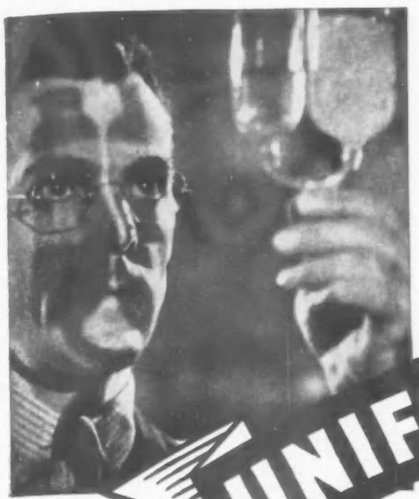
Ingling & Parker's Levy 1, sw se se 10-23n-1w, sand 2365-70 ft, abnd 2398 ft.

Okfuskee County—Rusk: Malernee's Tyler 1, ne sw se 7-11n-8e, Cromwell 3645 ft, flow 530 bbls, 3660 ft.

Oklahoma County — Oklahoma City: C. C. Peppers' Block 33, nw sw nw 34-12n-3w, Wx 6456 ft, shot 260 qts 6460-6525 ft, pump 238 bbls, 6525 ft.

Okmulgee County — Bald Hill: B. Miller's Bruner 12, nw ne sw 23-15n-14e, Glenn 1670-92 ft, shot 60 qts, pump 4 bbls, 1695 ft.

Osage County — Boston: Moore Oil Co.'s



TESTED and RETESTED MORE THAN 70 TIMES TO INSURE THE—

UNIFORMITY

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Tribe 1, c n½ se ne 32-22n-8e, brown lm 1844 ft, pb to 1860 ft, 1500 gal acid, pump 30 bbls, 2366 ft.

Osage County—W. Avant: Finance's Tribe 54, c nw nw 31-23n-11e, pink lime 1561 ft, abnd 2209 ft.

Payne County—Garr: Jordan Pet. Co.'s Hudson 1, ne nw nw 5-19n-6e, 2nd Wx 3800 ft, abnd 3861 ft.

Pawnee County—E. Watchorn: Alma's Tohee 1, sw ne ne 35-23n-3e, Wx 3924 ft, flow 500 bbls 21 hrs, 3936 ft.

J. E. Crosbie's Doyle 2, sw sw nw 36-23n-3e, Tonkawa 1787-1805 ft, 6,500,000 gas, 740 lbs rock pressure, 3956 ft.

Pawnee County—Garr: Deep Rock's Gooding 1, ne ne ne 13-19n-4e, Misener 3762 ft, pb 3735 ft, abnd 3800 ft.

Seminole County—N. Grayson Area: H. Diamond's Scott 1, se se sw 2-6n-5e, Cromwell 3155 ft, abnd 3165 ft.

Seminole County — NE Wewoka: Jordan's Cohee 1, c n½ nw ne 17-8n-8e, Hunton 3906 ft, pay 3906-14 ft, flow 70 bbls oil, 25 wtr, 4299 ft.

Stephens County—Velma: B. F. Lundy and Shearer's Wilkerson 1, ne nw nw 16-1s-5w, shale 1764 ft, abnd 2120 ft.

Skelly's Franklin 31, nw sw se 35-1s-5w, sandy shale 1270 ft, abnd 1300 ft.

Tulsa County—Owasso: Continental's Key 4, c ne nw 9-21n-13e, Bartles 1102-53 ft, Tucker 1281-98 ft, shot 80 qts, pump 9 bbls, 1299 ft.

OKLAHOMA WELLS DEEPENED

Oklahoma County—Britton: Sinclair Prairie's Stites A-1, se se sw 8-13n-3w, otd 6630 ft, Viola 6480 ft, pb to 6655 ft, 1000 gal acid, pump 9 bbls, 6657 ft.

Osage County — South Hominy: Oklahoma Power & Water Co.'s (Osage) 141, c e½ e½ nw 32-22n-9e, otd 2250 ft, Bartles 2238 ft, 3,500,000 gas, 2255 ft.

Payne County — Villa: Oklahoma Gasoline Plants' Lovett 2, nw sw nw 2-18n-6e, otd 3344 ft, Burgess 3257-63 ft, pump 10 bbls, 3472 ft.

Pontotoc County—Beebe: Cities Service's Norris, sw se nw 19-5n-5e, otd 2382 ft, dolomite 2520 ft, pay 2530-50 ft, pump 46 bbls oil, 200 wtr, 2602 ft.

OKLAHOMA WILDCATS

Garfield County—Failure: Champlin's Krejci 1, c s½ sw ne 27-21n-6w, Paw 3090 ft, B. Deer Creek 3390 ft, Oread 3790 ft, Lovell lime 4010 ft, Tonk lime 4260 ft, sand 4485 ft, Lay 5128 ft, Paw 5680 ft, Miss 6295 ft, Wood 6830 ft, Syl 6870 ft, Viola 6990 ft, Dense 7020 ft, Sdy dol 7085 ft, 1st Wx 7135 ft, 2nd Wx 7205 ft, abnd 7530 ft.

Jefferson County—Failure: Allied Materials' Hefner-Jones 1, sw sw ne 21-3s-4w, show oil 1613-22 ft, sand 2185-95 ft, reworked Arb 2409 ft, abnd 2550 ft.

Kiowa County—Failure: B. G. Walrick's Wayne 1, ne se se 2-7n-18w, lime 997-1000 ft, Syl 1000 ft, Viola 1100 ft, Bart 1126-28 ft, lime 1527-45 ft, granite wash 1571-73 ft, abnd 1622 ft.

PENNSYLVANIA

Washington County: W. S. George Pottery Co.'s Pittsburgh Coal Co. 1, 45,000 gas, 2325 ft.

TEXAS PANHANDLE

Carson County: Cities Service Oil Co.'s Burnett 53-A, I&GN 26, blk 5, 18,000,000 gas, 345 lbs rp, acid 7500 gals 2440-2595 ft, td 2626 ft.

Gray County: Magnolia's Fee (Tr. 227) 57, pump 70 bbls, shot 50 qts 2825-45 ft, td 2895 ft.

NORTH TEXAS

Archer County: Glover-Criswell-Nunneley's Richardson 1, 990 ft from n line J. Hensley sur, 621 ft w of e line lot 1, MEP&P sur, abnd 1242 ft.

W. C. Young-Burk Roy. Co.'s Texas Land & Mtg. Co. 1, 1250 ft from s and 330 ft from e lines blk 1, G. P. Meade "55" subdiv, abnd 1225 ft.

Clay County — Kimbell-Bohner: C. D. Knight's Summers 1, 990 ft from nw and 330 ft from ne lines ne 60 of sw 102-ac tr, blk 2, Wiley Wyatt-Longario sur, abnd 1211 ft.

Webb-Taylor Drlg. Co.'s Schaffner 1, 330 ft from s and 750 ft from e lines 180-ac tr, A. McGowan sur, A-519, abnd 1165 ft.

Wichita County—K-M-A Ellenburger: E. C. Oil Co.'s Mangold 35-E, 495 ft from s and 896 ft from w lines lot 33, P. Castleman sur, KMA lime 3730 ft, Bend 3930 ft, Ellenburger 4395 ft, abnd 4434 ft.

Wichita County—K-M-A: W. H. Hammon et al's Fee 19, 1320 ft from e and 4275 ft from n lines ET 2, flow 493 bbls, 18/64-in, shot 90 qts, Strawn 4001-42 ft.

Wichita County: Akin & Dimock's Hardin 9, 1535 ft from e and 1320 ft from s lines O. Farrish sur A-383, abnd 1352 ft.

W. H. Peckham et al's Martin 1-a, 1950 ft from s and 487 ft from w lines BS&F sec 12, A-744, abnd 1838 ft.

Young County: Panhandle Ref. Co.-S. H. Fagadau's Allar-Hunt 6, 1822 ft from m/s/n and 1450 ft from e lines s-1185-ac tr, TE&L 3409, Palo Pinto 1694 ft, flow 220 bbls, 3/16-in, natural, sand 2751-57 ft.

NORTH TEXAS WELL DEEPENED

Clay County—Ross: Continental et al's Ross 2-A, 440 ft from n and 1320 ft from e lines sec 8, J. Wyont sur, otd 5516 ft, pump 130 bbls, acid 8000 gals, 5465-5560 ft.

NORTH TEXAS WILDCATS

Archer County—Failure: W. H. Peckham et al's Wilson-McCrory 1, 1326 ft from n and 330 ft from e lines ATNCL sur, abnd 1555 ft.

Cooke County—Failure: Panhandle Ref. Co.-S. H. Fagadau's Gordon 1, 660 ft out m/n/se corner SP 11, A-970, Ellenburger 3975 ft, abnd 4016 ft.

Throckmorton County — Failure: Lion Oil Ref. Co.'s Williams 1, 660 ft out nec TE&L 2177, Bend 4235 ft, Marble Falls series 4458 ft, Mississippi 4846 ft, abnd 4976 ft.

Wichita County—Failure: C. C. Winfrey et al's George 1, 330 ft out swc SA&MG 1, A-268, abnd 760 ft.

Young County—Failure: Geo. W. Cooper et al's Graham 1, 3300 ft out nwc TE&L 2723, Palo Pinto 1466 ft, Bend 4157 ft, Marble Falls series 4410 ft, lime 4580 ft, abnd 4926 ft.

EAST TEXAS

Navarro County — Kernes (Hooser): Claude Bell-John Hooser's Walker 1, 330 ft from e and 1650 ft from n lines w-100 of 369-ac tr, John H. Millican sur, Taylor Marl 1800 ft, abnd 1850 ft.

Wood County—Hawkins: Humble's Minshew 1-B, 524 ft from w and 467 ft from s lines J. B. Crain sur, Woodbine 4523 ft, flow 372 bbls, ¼-in, natural, perf 4686-94 and 4810-27 ft, td 4835 ft.

EAST TEXAS WILDCATS

Angelina County—Failure: K. L. McHenry et al's Long Bell Lumber Co. 1, 3491 ft from se and 658 ft from sw lines 503-ac tr, Patrick Mullins sur, elev 238 ft, top Crockett 842 ft, Sparta 1252 ft, Weches 1460 ft, Wilcox 1746 ft, Midway 5051 ft, abnd 5054 ft.

Kaufman County: Failure: Elbert Williams' H. Berryman 1, 440 ft s of m/n/n and 440 ft from w lines 469-ac tr, E. Higdon sur, elev 329 ft, Pecan 1373-1442 ft, Austin 2093-2601 ft, Woodbine series 2982 ft, abnd 3026 ft.

Smith County—Failures: Iowa Payne Oil Co.'s Murray-Humble 1, 660 ft from e and 643 ft from n and s lines 50-ac tr, blk 32, Thomas Quevado sur, elev 512 ft, Pecan chalk 3930-4240 ft, Austin chalk 5340-5610 ft, top Woodbine 5784 ft, abnd 5825 ft.

B. F. Phillips et al's Starnes 1, 5000 ft from n and 2338 ft from w lines Samuel Epps sur, elev 407 ft, Pecan 2726-3113 ft, Austin 3615-3785 ft, top Woodbine 3865 ft, top Georgetown 4240 ft, base Goodland-Paluxy contact 5470 ft, sand 5551-62 and 5622-45 ft, top Glen Rose 5813 ft, abnd 5822 ft.

Kaufman County—Failure: C. F. Carter et al's Stanfield 1, 660 ft from n and 660 ft from sw lines 95-ac tr, Wesley Boles sur, elev 419 ft, top Woodbine 2030 ft, Fredericksburg 2700 ft, Paluxy 3375 ft, Glen Rose 3555 ft, abnd 3800 ft.

WEST CENTRAL TEXAS

Coleman County: Anzac Oil Corp.'s Morris 42, L. H. McNeil sur 284, abnd 2695 ft.

Jones County: S. B. Roberts Co. et al's Strand 1, c ne sw H&TC 5, blk 5, elev 1555 ft, flow 2448 bbls 2-in, acid 500 gals Palo Pinto lime 3446-50 ft.

T. P. Coal & Oil Co.'s Stokes 2-B, 1359 ft from s and 560 ft from w lines 57-ac tr, G. Martinez sur, abnd 2164 ft.

Ernest L. Wilson et al's Mashburn 3, 330 ft out sec n½ blk 85, DeWitt CSL, leag 126, flow 512 bbls ¾-in, natural, lime 2412-20 ft.

Shackelford County: R. H. Roark et al's Shackelford Co. Foor Farm 2, ne se sw sec 4, Blind Asylum Lands, abnd 981 ft.

WEST CENTRAL TEXAS WELL DEEPENED

Eastland County: Lone Star Gas Co.'s Duffer 2, 268 ft from n and 3890 ft from e lines 375-ac tr, S. N. Mathias sur, otd 3478 ft, abnd 3835 ft.

WEST CENTRAL TEXAS WILDCAT

Jones County — Failure: Fain-McGaha and S. C. Herring's Petty 1, 330 ft out nwc blk 29, leag 124, Grimes CSL sur, elev 1838 ft, abnd 2880 ft.

WEST TEXAS

Andrews County—West Fuhrman: N. G. Penrose, Inc.'s University-Amerada 1-D, near c ne nw sec 10, blk 10, elev 3227 ft, flow 132 bbls 2-in, shot 420 qts 4445-4627 ft.

Cochran County — Slaughter: Continental's Dean 11, 1952 ft from n and 2009 ft from e lines 1600-ac lse, leag 58, Martin CSL, flow 1571 bbls, 3-in, acid 12,000 gals, 4925-73 ft.

Jerry Hawkins et al's Mallet 23-A, 580 ft out nec lab 16, leag 47, Edwards CSL, flow 615 bbls, 1-1/16-in, acid 11,500 gals, 4920-65 ft.

Jerry Hawkins et al's Mallet 41-A, 580 ft out swc lab 15, leag 47, Edwards CSL, flow 480 bbls, cas, acid 10,000 gals, 4905-49 ft.

Jerry Hawkins et al's Mallet 46-A, 580 ft

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out swc lab 14, leag 47, Edwards CSL, flow 358 bbls, cas, acid 11,500 gals, 4911-60 ft.

Crockett County—Soma-Noelke: A. J. Rife-Floyd Scott's Thompson 1-B, 665 ft from n and 330 ft from e lines sec 58, blk GG, B. B. Ingham-T. C. Ry. sur, flow 5136 bbls, cas, natural. Yates sand 1295-1305 ft.

Gaines County—Wasson: Bay Pet. Corp.-Carl B. King's Blair-Sinco 1, 555 ft out nwc n½ se PSL 39, blk AX, flow 486 bbls, ½-in, acid 2000 gals, 4960-5027 ft.

Hockley County — Slaughter: Eugene Constantin, Jr. et al's Orcutt-Smith 1, 440 ft out swc e½ lab 11, leag 42, Rains CSL, flow 337 bbls, cas, acid 6000 gals, 4913-48 ft.

Jerry Hawkins et al's Mallet 18-A, 580 ft out nec lab 22, leag 47, Edwards CSL, flow 726 bbls, cas, acid 11,500 gals 4930-78 ft.

Texas Co.'s Slaughter 136, 510 ft out nec lab 81, leag 37, Zavalla CSL, flow 1493 bbls, acid 10,500 gals, 4930-5000 ft.

Pecos County—Taylor-Link: Dave Breeding et al's University 3-11, c ne se sec 11, blk 18, pump 35 bbls oil, 35 wtr, acid 3000 gals, 1571-93 ft.

Pecos County—White-Baker: Cardinal Oil Co.'s White-Baker 5-L, ne nw ne GC&SF 90, blk 194, flow 51 bbls, 1-in, shot 60 qts, 1867-74 ft.

WEST TEXAS WILDCAT

Runnels County—Failure: Pawnee Roy. Co.'s David 1, 660 ft from n and 1980 ft from e lines F. J. Ford-H&TC 330, blk 64, elev 1786 ft, Palo Pinto 4465 ft, Ellenburger 4570 ft, abnd 4730-35 ft.

SOUTHWEST TEXAS

Duval County—Conoco Driscoll: Continental's Driscoll 12-B, 3275 ft n of sl of 12,000-ac tr, 3300 ft fr nl, 2800 ft fr el U. Lott sur 484, A-900 ft, 6-in 3024 ft, sand 3016 ft, perf 3016-22 ft, 77 bbls, ¼-in, td 3024 ft.

SOUTHWEST TEXAS WILDCATS

Jim Hogg County—Failure: Sun's East 3-A, 2600 ft s, thence 330 ft w at right angles from n'ly sw cor of 4503-ac D lse, Santo Domingo de Arriba gr, abnd 4777 ft.

Starr County—Failure: D. C. DeWitt's Salinas Guerra 1, 40-ac blk 22, Dan L. Clark subdvn, 5 mi sw Guerra field, abnd 1720 ft.

LOWER TEXAS COAST

Jackson County—Stewart: W. Stewart Boyle's Rose & Sample 2, 660 ft fr s&wl's 160-ac tr, George Sutherland sur, A-75, 5½-in 5485 ft, perf 5424-30 ft, gas and water, reperf 4996-5003 ft, flow gas, ungauged, ⅛-in, td 6005 ft.

Jackson County — North LaWard: Cities Service Chamrad Unit 1, 917 ft fr sl, 475 ft fr el of blocks A&B Pickering Ranch subdvn, Jessie White Lge, A-82, 5½-in 5271 ft, perf 5206-23 ft, 55 bbls, 3/16-in, td 5340 ft.

Jackson County—Mayo: Lonnie Glasscock's Heard 1, 202-ac tr James Cummings sur 13, 7-in 5199 ft, perf 5128-36 ft, flow 30 bbls, 7/64-in, td 5650 ft. Opens Marginulina sand.

Victoria County—East Placedo: Stanolind's Vanderberge & Hill 17, 624 ft nw St. LB&M right-of-way, 996-ac lse, E. Benavides gr, 5½-in 6893 ft, sand 6883 ft, perf 6889-91½ ft, 47 bbls, 3/16-in, td 6893 ft.

SOUTH CENTRAL TEXAS WILDCATS

Guadalupe County—Failure: H. H. Weinert and A. B. Bauchman's Gieseck 1, 467 ft fr wl and 3000 ft fr sl of 105-ac lse, Green DeWitt sur 13, 12 mi s Seguin, abnd 3381 ft.

Wilson County—Failure: Rowan & Hope's Sanders 1, Lavernia area, 101-ac tr, Francisco Herrera gr, abnd 1204 ft.

TEXAS GULF COAST

Fort Bend County—Big Creek: Angle & Angle's George 1, lot 30, 40-ac tr, J. H. P. Davis sur, B. Wickson subdvn, abnd 7500 ft.

TEXAS GULF COAST WILDCATS

Brazoria County—Failure: Glenn H. McCarthy's Munson 1, 466-ac tr, Cornelius Smith sur, A-129, casing 11,248 ft, perf 11,226-31 ft, perf 10,846 ft, perf 10,710-25 ft, abnd 11,454 ft.

Harris County—Failure: O. W. Killam's Dodd 1, 3 mi se Joyce Richardson field WC RR 13, abnd 7510 ft.

WEST VIRGINIA

Calhoun County: So. Penn. Nat. Gas Co.'s Sharp 13, 18 bbls, 2235 ft.

McCall Drlg. Co.'s Ayers 1, 33,300 gas, 2183 ft.

Harrison County: Eagle Gas Co.'s Lyons 1, 58,600 gas, 2840 ft.

Jackson County: W. Va. Gas Corp.'s Cunningham 1, 3,176,000 gas, 5164 ft.

Godfrey L. Cabot, Inc.'s Fisher 1050, abnd 5332 ft.

Marshall County: Mfgrs. Light & Heat Co.'s Pyles 3672, 127,000 gas, 3128 ft.

Putnam County: G. H. Summerson's Zerkler 1, 33,000 gas, 2125 ft.

Roane County: American Oil Development Co.'s Conley 1, abnd 2500 ft.

So. Penn Nat. Gas Co.'s Epling 2, gas, 1962 ft.

WYOMING

Fremont County—Pilot Butte: Broderick & Gordon's Fidelity Trust 1, cel ne sw 27-3n-1w, rotary, 12.5 gas, perf 8⅝-in 3293-3300 ft in Muddy sand, pb to 3533 ft, water in Tensleep, td 6297 ft. Located 2 mi south of deep Tensleep discovery at Pilot Butte.

Natrona County—Cole Creek: General Petroleum Corp.'s 33-21-G (Gov't), nw se nw 21-35n-77w, pump 90 bbls, Shannon sand 4506 ft, td 4544 ft.

Natrona County — Notches: Tri-Good Oil Co.'s Gov't 3, ne nw nw 10-37n-85w, rotary, pump 100 bbls, Tensleep 2868 ft, td 2698 ft.

Park County—Oregon Basin: Husky Refining Co.'s Nielson 5, nw se sw 30-51n-100w, rotary, pump 198 bbls, Tensleep 4037 ft, td 4084 ft.

Ohio's Custer 4, ne se se 32-52n-100w, rotary, pump 400 bbls, Embar 3446 ft, td 3781 ft.

Yale Petroleum Co.'s Hancock 1, nw nw nw 5-50n-100w, pump 240 bbls, Embar 3311 ft, td 3364 ft.

Yale's Hancock 2, nw ne nw 5-50n-100w, rotary, flow 192 bbls, 20/64-in, Embar 3217 ft, td 3252 ft.

Niobrara County—Lance Creek: Continental's Rodeo-1 6, se se se 27-36n-65w, swab 66 bbls, Leo 5386 ft, td 5534 ft.

Sweetwater County—Lost Soldier: Sinclair Wyoming Oil Co.'s U. S. Petroleum 10, nw nw se 11-26n-90w, rotary, pump 500 bbls, Tensleep 5262 ft, td 6475 ft.

Sweetwater County — Wertz: Sinclair Wyoming's Unit 28-A, ne sw se 1-26n-90w, flow 600 bbls, Tensleep 6130 ft, td 6495 ft.

Big Horn County—Byron: Ohio's Willey 1, nw nw 25-56n-97w, rotary, pump 312 bbls, Embar 5122 ft, Tensleep 5187 ft, 7-in 5289 ft, td 5352 ft.

Taylor Oil Co.'s Hoskins 2, c se sw 25-56n-97w, rotary, pump 350 bbls, Embar 5503 ft, Tensleep 5390 ft, 5-in 5369 ft, td 5435 ft, elev 3935 ft.

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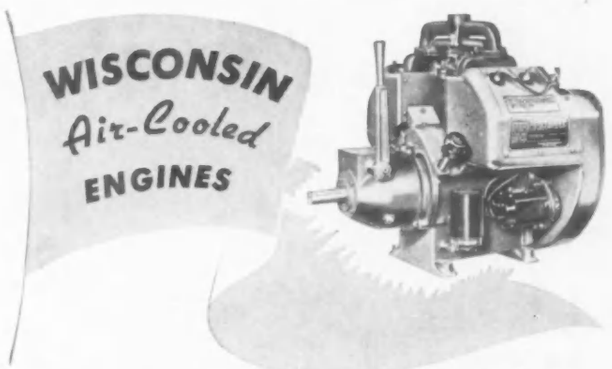

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Oil Co.'s Gov't 18, sw nw sw 2-33n-83w, rotary, pump 60 bbls, 5-in on top of Tensleep 2340 ft, td 2456 ft.

Niobrara County—Lance Creek: Continental's Rodeo-OPC-1, 6, se se se 27-36n-65w, rotary, flow 240 bbls, 65/8-in 5386 ft, perf 5280-5320 ft, First Leo (Pennsylvanian), td 5534 ft.

Park County—Oregon Basin: Yale Petroleum Co.'s Atherly 3, sw nw sw 33-52n-100w, rotary, pump 300 bbls, Embar 3315 ft, 6⅝-in 5547 ft, td 3586 ft, elev 5279 ft.

Sublette County — LaBarge: Texas' Gov't 1G-X, se nw nw 34-27n-113w, cable, pump 60 bbls, 1035 ft.

Texas' Gov't 2-BX, ne nw nw 34-27n-113w, cable, flow 66 bbls, 1080 ft.

WYOMING WILDCATS

Crook County — Moorcroft Area — Failure: Continental's Coltharp 1, c ne sw 18-51n-66w, abnd after test of inert gas, estimated at 2.5 ft, proved to be largely nitrogen. Gas developed through perforations in production string between 1492-1500 ft, td 3610 ft.

United States Wildcat Starts

CALIFORNIA

Kern County: Shell's Hopkins Fee 78-31, 31-27-20, Antelope Hills area, lcn.

Texas Co.'s Bowerbank 1-6-C, 6-29-24, Bowerbank area, fndn.

Shell's KCL 84-27, 27-30-28, Canfield Ranch area, lcn.

Los Angeles County: J. Paul Getty's Foothill Orchards 1, 6-2-15, Chatsworth area, spud.

So. Calif. Petroleum Co.'s Lasalle 44-1, 3-3-16, Newhall area, prep to spud.

ILLINOIS

Clinton County: Rockhill Oil Co.'s Pettus 1, ne ne ne 9-3n-3w, lcn.

Sohio Prod. Co. and Sunray Oil Co.'s Wassem 1, sw sw nw 7-3n-1w, lcn.

Fayette County: J. Lee Youngblood's A. Smith 1, c nw sw ne 24-6n-1e, lcn.

Perry County: Texas Co.'s Matlavish 1, nw sw ne 36-4s-2w, lcn.

Putnam County: Fuller & Turner's McGhiey 1, e½ e½ 3-31n-1w, dr.

Wabash County: Elmes Caudell's Price 2-C, sw se se 23-1n-12w, lcn.

White County: N. V. Duncan, Inc.'s Metcalf 1, sw sw se 31-3s-14w, lcn.

KANSAS

Barton County: Texas' Lantermann 1, c sw sw 27-19s-11w, mim.

Graham County: Skelly Oil's John Mills 1, sw sw se 2-6s-23w, mim.

McPherson County: Westgate - Greenland's Ingemanson 1, sw sw sw 2-17s-5w, lcn.

Russell County: Harry Gore's Kastrup 1, nw nw nw 15-15s-12w, br.

Saline County: Braniff & Goering's Linshield 1, ne ne se 34-16s-4w, rur.

NORTH LOUISIANA

Catahoula Parish: C. C. Gilger's and F. R. Jackson's Peck 1, 2184 ft from north line and 660 ft from west line 51-10n-8e, lcn.

Grant Parish: Pan American Production Co.'s G. A. Foster C-1, nw ne 2-6n-1w, lcn.

Red River Parish: Westgate-Greenland Oil Co.'s Westdale 1, ne 29-14n-11w, lcn.

DeSoto Parish: C. D. Neff's Pollock 1, se ne 8-13n-12w, lcn.

OKLAHOMA

Creek County: Rudco's Rudman 1, se sw ne 36-14n-10e, spud.

Lincoln County: Stanolind's Leonard 1, sw sw sw 10-12n-2e, lcn.

R. W. Willis' School Land 1, nw nw nw 30-12n-6e, spud.

Pawnee County: H. E. Tyson's Buzan 1, sw sw se 11-22n-4e, mim.

Payne County: T. N. Berry & Co.'s Fee 1, nw se se 26-19n-2e, spud.

Amerada-Stanolind's Ingham 1, sw nw se 28-20n-4e, woc 162 ft.

Osage County: Cities Service's Osage 488, c w½ sw sw 7-26n-11e, sd 1055 ft.

WEST CENTRAL TEXAS

Shackelford County: R. H. Roark et al's J. L. Todd 1, sw sw ne sec 11, Blind Asylum Lands, lcn 800-ft test.

SOUTHWEST TEXAS

Duval County: H. J. Porter's Dunn 1-A, 660 ft fr sl, 3300 ft fr wl 1600-ac tr, sur 67, Diego de Hinjosa gr, sw Realitos, lcn 5000-ft test.

LOWER TEXAS COAST

Karnes County: Seaboard Oil Co.'s Rzeppa 1, 7 mi s Falls City, 101-ac lse, tr 22, Don Erasmo Seguin sur, A-10, lcn 6000-ft Wilcox test.

Victoria County: Darby Petroleum Co.'s Bankhead 1, 152-ac tr, blk 39, Roseborough Ranch subdvn, Fernando de Leon sur, A-67, 4 mi se Inez, lcn 7000-ft test, Allen & Morris, contractors.

TEXAS GULF COAST

Colorado County: Magnolia's Anderson 1, south 40-ac tr, GH&H RR 15, north Lissie area, 561-ac lse, lcn 11,500-ft test.

San Jacinto County: S. A. Brewster and W. O. Bartle's Modesett 1, 9 mi e of Shepherd, 205-ac tr, W. G. Logan sur, A-24, lcn 8500-ft test.

EAST TEXAS

Kaufman County: Elbert Williams et al's H. Berryman 1-E, 440 ft out nwc 165-ac lse, E. Higdon sur, lcn.

NORTH TEXAS

Clay County: Continental Oil Co.'s Stephens 1, 1347 ft from e and 2043 ft from n lines G. W. Stipps sur A-249, lcn 6400-ft test.

Jack County: Chas. H. Kadane et al's Carter-Shell 1, 330 ft from e and 1200 ft from s lines TE&L 3305, lcn 500-ft test .

Fannin County: J. C. Robbins, Jr. et al's Davis 1, 660 ft from e and 2060 ft from s lines of S. L. Leonard sur, 2 mi nw Leonard, lcn 2200-ft test.

Throckmorton County: A. D. Bissey et al's Riley 1, 330 ft out swc 200-ac lse, TE&L 1601, lcn 800-ft test.

WEST TEXAS WILDCAT START

Hudspeth County: Albert R. Jones et al's E. C. Mowry 1, 2179 ft from s and 685 ft from e lines T&P 36, blk 70, Tsp. 2, 4500-ft cable tool test.

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Men in the Industry's News

ARTHUR B. GUISE, formerly engaged in fire and safety engineering for the United States Rubber Company, has joined duGas Engineering Corporation as vice president in charge of development. Guise, graduated from Massachusetts Institute of Technology as a chemical engineer, spent a number of years in development work in the petroleum industry before joining Factory Mutual Laboratories where he was employed from 1935 until 1941. He is a member of the American Petroleum Institute and the National Fire Protection Association. Formerly a member of the committee on Flammable Liquids for the N.F.P.A., he is now a member-at-large of the committees on Hazardous Chemicals and Explosives, and Special Extinguishing Equipment.

W. M. JOHNSON, assistant land manager for Shell Oil Company, Houston, is on leave, having been commissioned lieutenant commander, United States Naval Reserve, and is stationed in New York. R. L. Trott is acting assistant land manager in Johnson's absence.

W. W. KENDRICK, Humble Oil & Refining Company, Natural Gas Division, has been transferred from Tomball to Pledger as district chief clerk.

WM. J. OVERTON, for the past three years secretary-manager of Engineers Club of Tulsa, has resigned to become superintendent of personnel and director of safety for Hinderliter Tool Company, Tulsa.

S. G. SANDERSON, Gulf Oil Corporation, Tulsa, has been elected president of Tulsa Club, for the year just starting.

J. P. MORONEY, since 1935 in charge of Sinclair Wyoming Oil Company at Casper, has been elected vice president and director of the firm.

C. R. BICKEL, now Kansas division manager for Shell Oil Company, is being transferred to Centralia as Eastern division manager. E. W. Clark, formerly Oklahoma division manager, transfers to Wichita to take charge of that division, while Earl E. Davis, in addition to his present duties as Mid-Continent drilling superintendent, has been named Oklahoma division manager, effective March 1.

G. L. BRENNAN, manager of the liquefied petroleum gas division of Warren Petroleum Corporation, addressed the Tulsa Traffic Club, January 28, on liquefied petroleum gases and their uses.

W. T. BORN, director of Geophysical Research Corporation, addressed the Tulsa Petroleum Accountants Society, January 28, on geophysical prospecting. G. B. Sandel, Stanolind Oil & Gas Company spoke on "Stabilization of Salaries and Wages."

GEORGE A. HILL, JR., president of Houston Oil Company of Texas, Houston, has been appointed chairman of the Petroleum Industry War Council's committee on protection of petroleum facilities. The committee, with regional subcommittees in districts of the country corresponding to the various Army Corps areas, is actively working to correlate the activities of the many governmental agencies which have supervision of various elements of the protection of the oil industry's essential war facilities. Hill succeeds the late William S. Farish, who was chairman of the committee until his death November 29, 1942.

HENRY PULLMAN was elected president of the Los Angeles Chapter of Nomads at a recent meeting. Other officers are Roland Smith, vice president; Wallace A. Sawdon, secretary; Tom Martin, assistant secretary; Elmer Smith, treasurer; Roger Henquet, assistant treasurer; J. V. Robinson, sergeant-at-arms; George Trembley, deputy sergeant-at-arms. W. F. Bettis and W. R. Martin were elected to represent the chapter on the National Board of Regents.

A. W. BAUCUM, The Texas Company, has been elected chairman of the Houston Chapter of the American Petroleum Institute. He succeeds Bowman Thomas of Humble Oil & Refining Company.

J. M. Cooper, Gulf Oil Corporation, was elected first vice chairman; Paul Ward, The Ohio Oil Company, second vice chairman; and R. C. Chenoweth, Oil Well Supply Company, secretary-treasurer.

The following were elected members of the advisory board: J. P. Mallott, Continental Oil Company; Carl E. Reistle, Humble Oil & Refining Company; Wright Hodges, Standard Oil Company of Kansas; Harvey Hardison, Standard Oil Company of Texas; Paul Hubbard, Gulf Oil Corporation; W. S. Crake, Shell Oil Company, and T. H. Andrews, Stanolind Oil & Gas Company.

G. P. COKINOS, petroleum engineer with the Oil and Gas division of the Texas Railroad Commission, has been accepted as an aviation cadet in the Army Air Force and will be called March 1. He has been with the commission in South Texas at the Corpus Christi office for the past two years. Cokinos was graduated from Texas A. and M. in petroleum engineering in 1939 and worked with the Hamman Oil Company before going to work with the commission.

C. P. PARSONS, vice president of Halliburton Oil Well Cementing Company, spoke to Purchasing Agents Association of Tulsa January 26 on "Controlling Nature's Fury."

W. C. CLEMONS, formerly assistant production superintendent, has been appointed production superintendent for Gulf Oil Corporation with headquarters at Houston.

GEORGE B. SANDEL, attorney for Stanolind Oil & Gas Company, addressed the Petroleum Accountants Society of Tulsa, January 28 on "Stabilization of Salaries and Wages." Participating in the discus-

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sion with Sandel were James O. Marberry, Jr., attorney for Skelly Oil Company, and LeRoy Young, job analyst, The Carter Oil Company. W. T. Born, director of Geophysical Research Corporation laboratory, spoke on "Geophysical Prospecting."

PHIL K. COCHRAN, division geologist for The Carter Oil Company, Shreveport, Louisiana, has been appointed assistant division superintendent at Shreveport. R. W. Beck, stationed at Matoon, Illinois, has been transferred to Shreveport and promoted to assistant division geologist.

ELMER FINCH, San Antonio geologist and paleontologist, has been appointed on the geological staff of PAW and has gone to Washington to assume his duties. He formerly lived in Houston and was associated with Pilgrim Exploration Company.

W. S. CRAKE, Shell Oil Company, Incorporated, Houston, has been appointed to the NESS-WPB Technical Advisory Committee on Steel Bars, Forgings and Castings for Pressure Vessels and Pressure Piping, Section I—Bars and Bolting Materials. Crake, as chairman of the Subcommittee on Valves and Fittings of the API Pipe Committee, will represent the interests of the oil industry in connection with bolting materials required for valves and fittings for the industry.

H. N. GREIS, president of Deep Rock Oil Corporation, announced that the directors of the company, at the meeting held January 22, authorized the payment of a dividend of 25 cents per share on the 400,000 shares of common stock. This dividend will be paid February 15, 1943, to stockholders of record February 5, 1943.

DARSIE A. GREEN was elected president of Illinois Geological Society at a recent meeting. J. R. McGehee was elected vice president while Fred H. Moore was named secretary-treasurer.

CHARLES A. MEYER, treasurer of the National Supply Company, passed away at his home in Pittsburgh, January 15, at the age of 59, following an illness of two months duration. Meyer was affiliated with Fairbanks-Morse prior to joining The National Supply Company upon the retirement of Treasurer Charles W. Clapp in 1923. From his many years of association with banking and finance, Meyer enjoyed an extensive acqquaintance.

R. B. CLULEY, Carter Oil Company at Tulsa, is transferring to Evansville, Indiana, from which point he will scout Eastern Illinois, Indiana and Kentucky.

COMMANDER V. H. WILHELM, USNR, who has been on duty as inspector, and Commander H. P. Stolz, USNR, who has been on duty as assistant inspector, in the office of Naval Petroleum Reserves in California, Los Angeles, recently received promotions from their former rank of Lieutenant Commander to their present rank, dated back to July, 1942.

DR. LEWIS B. KELLUM, professor of geology and director of the Museum of Paleontology, University of Michigan, gave a paper on "The Geologic History of North Central Mexico and Its Bearing on Petroleum Exploration" before the Shawnee and Oklahoma City Geological Societies at the January meeting.

H. W. SLAUGHTER of E. W. Saybolt and Company, petroleum inspectors, has returned from a long stay in Aruba, Dutch West Indies.

Squeaks from the Bull Wheel

Overlooked

"I tell you, no man ought to marry a woman who's fat or lean, tall or short, large or small."

"I suppose you have never married."

"Oh, yes. I forgot one size."

"What size?"

"Medium size."

Dilemma

"The jury having acquitted you of the charge of bigamy, you are free to leave the court and go home."

"Thank you, Your Honor, but I want to be on the safe side—which home?"

Meant It

"On the day on which my wedding occurred—"

"You'll pardon the correction, but affairs such as marriages, receptions, dinners and things of that sort 'take place.' It is only calamities which occur. You see the distinction?"

"Yes, I see. As I was saying, the day on which my wedding occurred—"

Dead Wreckoning

Examiner—"What would you do if the car brakes suddenly failed to work?"

Pupil—"Hit something cheap."

Not His Fault

Hubby (at Golden wedding): "Well, dear, all the years have flitted by, and I haven't deceived you yet, have I?"

Wife: "No, John, but goodness knows you've tried hard enough."

Budget

"How do you spend your income?"

"About 30 percent for shelter, 30 percent for clothing, 40 percent for food and 20 percent for amusement."

"But that adds up to 120 percent."

"That's right!"

Service Charges

Recent rules and regulations, pertaining to service charges to be made effective by large banking institutions in metropolitan areas, should be more than of passing interest to our readers. The new rules for service charges are listed as follows:

1. Entering bank: front door, 50 cents, back door, 25 cents.
2. Spitting on floor: plain, 5 cents; tobacco, 10 cents.
3. Asking for balance: $1.
4. Arguing about balance: in civil manner, 50 cents; in quarrelsome manner, $1; second time, $2.50; third time, $5.
5. Speaking out of turn: To president, $1; to cashier 50 cents; to assistant cashier, 25 cents; to any vice president, no charge.

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